Appendix 3.

Sample Forms

(Attached - Task 1.11, 8 Report: Data Management Needs Analysis.

- Task 2 Report: Procedures to Notify Industrial Users.)

Permit No. #_____

Application No. #_____

City of Indianapolis
Department of Public Works

AUTHORIZATION TO DISCHARGE

INDUSTRIAL WASTEWATER TO THE MUNICIPAL SEWER SYSTEM

In compliance with the provision of Chapter #27 of the Municipal Code of the City of Indianapolis, Indiana, and in accordance with General Ordinance #44, 1978,

is authorized to discharge wastewater from a facility located at

to the Indianapolis Municipal Sewer System.

The permit shall become effective on

This permit and the authorization to discharge wastewater shall expire at midnight _____, 19_____. In order to renew authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as required by the Department of Public Works, City of Indianapolis, Indiana, no later than sixty (60) days prior to the date of expiration.

Signed this _____ day of _____, 19_____, for the Department of Public Works, City of Indianapolis, Indiana.

_____
Dale R. Bertelson, Section Head
Industrial Surveillance

_____
Richard A. Rippel, Director
Department of Public Works

Part I

Page # of

Permit No. #_____

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning _____ and lasting until _____, the permittee is authorized to discharge from a facility located at

Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Effluent Characteristic	Daily Average	Monitoring Frequency	Sample Type

SPECIAL LIMITATIONS

a. In addition to the aforegoing limitations, the provisions of Sections #307 and #308 of the "Federal Water Pollution Control Act Amendments" of 1972 and Indiana Stream Pollution Control Board Regulations are incorporated by reference into this permit.

b. Samples taken in compliance with the monitoring requirements above shall be taken _____

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

The permittee shall submit monitoring reports to the Industrial Surveillence Branch of the Department of Public Works containing results obtained during the previous month and shall be postmarked no later than the 15th day of the month following each completed monitoring period. The first report shall be submitted by _____ for the month of _____.

a. The Industrial Surveillence Branch is at the following location:

Industrial Surveillence Branch
Department of Public Works
2700 South Belmont Ave.
Indianapolis, Indiana 46221

3. Test Procedures

Test procedures for analysis of pollutants shall conform to regulations published pursuant to Section #304 (g) of the Act, the most recent edition of "Standard Methods for the Examination of Water and Wastewater", or other methods approved by the Indiana Stream Pollution Control Board, under which such procedures may be required.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following data:

a. The Exact Place, Date and Time of Sampling

b. The Dates the Analyses were Performed

c. The Person(s) Who Performed the Analyses

d. The Analytical Techniques or Methods Used

e. The Results of All Required Analyses

5. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retaimed for a minimum of three (3) years, or longer if requested by the Industrial Surveillence Branch of the Department of Public Works.

C. Special Conditions

SAMPLE TYPES:

GRAB: A portion of the discharge taken from the sampling point during a period of maximum flow and/or production.

COMPOSITE: A sample made up of equal portions of the discharge taken from the sampling point at 30 minute intervals during the production cycle. No samples are to be taken on off-days or when there is no production.

ESTIMATE: Total of calculation made from pump discharge ratings and/or from billings of water suppliers.

METER: Readings taken from a flow meter.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. the discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Non-Compliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily average effluent limitations specified in this permit, the permittee shall provide the Industrial Surveillance Branch of the Department of Public Works the following information, in writing, within five (5) days after becoming aware of the condition:

a. A description of the discharge and cause of non-compliance.

b. The period of non-compliance, including exact dates and times, or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

3. Facilities Operation

The permittee shall at all times maintain a good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the Municipal sewer system resulting from non-compliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

5. The Industrial Surveillance Branch shall be notified immediately in the event of an accidental spill or slug discharge into the sewer system at 633-5476 or 353-2111 after 5 p.m. Monday-Friday, or weekends and hoildays.

6. Removed Substances

Solids, sludges, filter backwash or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering Muncipal sewer systems and to be in compliance with all Indiana Stautory Provisions, regulations, relative to refuse, liquid or solid waste disposal.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall, upon the reduction, loss or failure of one or more of the primary sources of power to the facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production or discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

8. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall notify the succeeding owner or controller of the existence of the permit by letter, a copy of which shall be forwarded to the Industrial Surveillance Branch of the Department of Public Works.

9. Permit Modification

After notice and opportunity for a meeting with the Industrial Surveillance Office, this permit may be modified, suspended or revoke in whole or in part during its term for shown cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit.

b. Obtaining this permit by misrepresentation of failure to disclose fully all relevant facts,

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provisior to other circumstances, and the remainder of the permit, shall not be affected thereby.

INDIANAPOLIS DEPARTMENT OF PUBLIC WORKS

ADVANCED WASTEWATER TREATMENT

INDUSTRIAL DISCHARGE PERMIT APPLICATION

Section I Applicant and Facility Description

Unless stated otherwise, all items are to be filled out completely. If an item is not applicable indicate by noting "NA".

1. Name of Facility _____
2. Mailing Address _____
3. Address of Premises _____
4. Applicant's Authorized Agent or Contact Official

   _____
   Name and Title

   _____
   Phone Number

5. Responsible individual to contact in case of emergency (e.g., spill, fire, process upset, etc.)

   _____
   Name and Title

   _____
   Phone Number

Section II Plant Operations

1. On a separate sheet, provide a detailed description of the manufacturing process or service activity provided on the premises. Include a description of how each process waste stream is generated. Information should be related to Question #5 in Section III.
2. Principal raw materials used and intermediate products:

   _____
   _____
   _____
   _____
   _____

3. Chemicals and compounds used (Refer to Table I):

_____
_____
_____
_____

4. How are these chemicals stored?

_____
_____

5. Description of products or service and annual production rate, if applicable:

_____
_____
_____

6. If your facility is subject to a National Categorical Pretreatment Standard, has a baseline report (403.12(b)) been submitted:

_____

Section III Water Usage and Discharge Information

1. List intake water sources and volumes:

Source	Volume	(Check One) Estimated/Measured
Municipal Water System	_____gallons/day	_____/_____
Private Well	_____gallons/day	_____/_____
Surface Water	_____gallons/day	_____/_____
Other	_____gallons/day	_____/_____

2. List average volume of discharge or water loss to:

Source	Volume	(Check One) Estimated/Measured
*City Sewer System	_____gallons/day	
Natural Outlet	_____gallons/day	_____/_____
Waste Hauler	_____gallons/day	_____/_____
Evaporation	_____gallons/day	_____/_____
Contained in Product	_____gallons/day	_____/_____
Other (Specify)	_____gallons/day	_____/_____

3. List average water usage for:

Source	Volume	(Check One) Estimated/Measured
*Process Wastestream #1	_____gallons/day	
*Process Wastestream #2	_____gallons/day	
*Process Wastestream #3	_____gallons/day	
*Cooling Water	_____gallons/day	
*Sanitary Water	_____gallons/day	
Boiler Feed	_____gallons/day	_____/_____
Other (Specify)	_____gallons/day	_____/_____

*These values must be average measured volumes, not approximated.

4. Is the discharge to the sewer: Continuous _____
Batch _____

If batch discharge, give the frequency of occurrence:

_____

What is the average volume in gallons of each batch?

_____

What is the peak volume in gallons of each batch?

_____

5. Provide a schematic of the plant flow showing process, sanitary, cooling streams, etc., and their point of entry into the sewer system. Indicate on the schematic, the point where sampling will occur.

Section IV Pretreatment

1. Describe any wastewater treatment equipment or processes in use:

_____
_____
_____
_____
_____

2. Describe any additional pretreatment facilities and/or processes under consideration. Include a specific time schedule for completion:

_____
_____
_____
_____
_____

3. If a treatment system exists, what method is utilized to dispose of pretreatment sludges/residuals?

_____
_____
_____

4. If a private hauler is used for sludges/residuals disposed, give name and ISBH permit number.

_____
_____

5. Where is ultimate disposal site for sludges/residuals?

_____
_____
_____

Section V Wastewater Characteristics

1. Attach any sampling data pertaining to the facility discharge to the sewer system. Explain were and when the sampling was accomplished, what type of sample was taken (e.g., grab, composite), and how many were analyzed.

2. If no sampling data is available, testing must be performed on the discharge for any pollutant believed to be present. A representative list of pollutants is contained in Table I, attached to this application. The sample must be a 24-hour composite taken during normal production activity and/or representing typical wastewater flows.

INDUSTRIAL WASTE WATER SAMPLE ANALYSIS

INDUSTRY OR BUSINESS: _____

LOCATION: _____

CONTACT PERSON: _____ PHONE: _____

DATE: _____ TIME: _____ M WEATHER: _____

DAY OF WEEK: _____ SAMPLED BY: _____

FIELD OBSERVATIONS

COLOR: _____ ODOR: _____

FLOATING MATERIAL: _____ TEMP.: _____ pH: _____

FLOW: _____ EST OTHER: _____

SAMPLE TYPE: _____ SAMPLE NUMBER: _____

LAB ANALYSIS

ANALYSIS	CK	RESULTS	RUN BY	COMMENTS
pH				
SUS. SOL.		mg/l		
B.O.D.		mg/l		
C.O.D.		mg/l		
AMMONIA-N		mg/l		
OIL & GREASE		mg/l		
TOTAL HYDROCARBON		mg/l		
CADMIUM		mg/l		
COPPER		mg/l		
CHROMIUM		mg/l		
LEAD		mg/l		
NICKEL		mg/l		
ZINC		mg/l		
TOTAL CYANIDE		mg/l		
PHENOLS		mg/l		

INDUSTRIAL INSPECTION SURVEY

NAME OF INDUSTRY _____ S.I.C. # _____

LOCATION _____ PHONE _____

CONTACTED _____ DATE _____ TIME _____

NO. OF SHIFTS _____ APP. NO. EMPLOYEES _____ DISCHARGE FLOW _____

WATER SOURCES _____

INDUSTRIAL DESCRIPTION _____

PRINCIPLE PRODUCTS _____

PRETREATMENT CAPABILITIES _____

SLUDGE OR RESIDUE DISPOSAL _____

NUMBER OF CONNECTIONS _____ SAMPLES TAKEN _____

PRIMARY USES OF WATER _____

INDUSTRIAL DISCHARGE PERMIT REPORTING FORM

PLEASE COMPLETE AND SUBMIT THIS FORM TO THE DEPARTMENT OF PUBLIC WORKS BY THE 15th OF THE FOLLOWING MONTH.

DEPARTMENT OF PUBLIC WORKS
INDUSTRIAL SURVEILLANCE
2700 SOUTH BELMONT AVENUE
INDIANAPOLIS, INDIANA 46221

PERMIT NUMBER

DISCHARGE NO.

MO. YR.

EFFLUENT CHARACTERISTICS	FLOW	pH					
SAMPLE TYPE							
FREQUENCY							
EFFLUENT LIMITATIONS							
UNITS / DATE	GPD		P.P.M.				
MONTHLY AVERAGE							
LOWEST VALUE							
HIGHEST VALUE							

SIGNATURE OF AUTHORIZED AGENT

DATE

FINAL REPORT

DATA MANAGEMENT NEEDS ANALYSIS

PEAT MARWICK

Peat, Marwick, Mitchell & Co.
1990 K Street, N.W.
Washington, D.C. 20006
202-223-9525

April 15, 1983

Dr. Vicky Keramida
Project Manager
Pretreatment Program
Department of Public Works
2460 City-County Building
Indianapolis, IN 46204

Dear Dr. Keramida:

As part of our contract to develop a pretreatment program for the City of Indianapolis, Peat, Marwick, Mitchell & Co. is pleased to submit this draft final report for Tasks 1.11 and 8 describing the Data Management Need for the Indianapolis Pretreatment Program. This report reviews the existing system for managing data within the Industrial Surveillance Branch and develops the requirements for an automated system.

This report represents the first step by the city in developing a more efficient data management system. Additional steps will be required to select and implement a working system.

It has been a pleasure working with you, Dale Bertelson, and the Industrial Surveillance staff in developing this report. We have appreciated your comments and insights in developing the requirements for your data management system.

Very truly yours,

John A. Wander/DHE

John A. Wander, Principal

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

This report was prepared by Peat Marwick as a part of the City of Indianapolis Pretreatment Program. Peat Marwick was assisted in the development of this document by Mark Battle Associates (MBA) and James M. Montgomery, Inc. (JMM). The report was prepared with the assistance and review of Dr. Vicky Keramida, Department of Public Works Project Manager, and Mr. Dale Bertelson, Chief of the Industrial Surveillance Branch. Peat Marwick's principal author was Deems A. Buell, and Mark Battle Associates' principal contributor was Mr. Peter O'Donohue. The James M. Montgomery team was led by Dr. Larry Russell and Mr. Chris Cain.

LIST OF EXHIBITS

LIST OF EXHIBITS (continued)

I. BACKGROUND

The City of Indianapolis has undertaken the development of an industrial waste pretreatment program to update the operation of the city's Industrial Surveillance Branch. This effort has included the need to review and recommend improvements to the Industrial Surveillance Branch's data management practices, including their ability to collect and use information about local industries.

Data management is a critical concern for a successful pretreatment program in that these programs are information driven. Records must be kept to collect a variety of information, including:

- major industries:
  - location;
  - contacts; and
  - processes.
- permits:
  - discharge limitations; and
  - variances.
- city sampling results:
  - analyses; and
  - field conditions.
- self-monitoring results:
  - analyses;
  - flow; and
  - special conditions.

. billing parameters:

  . sampling charges; and

  . surcharge.

This information must not only be collected but it also must be cross-referenced to identify violations of discharge limitations, to react to slug dischargers, to develop work routines for the Industrial Surveillance Branch staff, to prepare sampling bills, etc.

It becomes readily apparent that a major function of the Industrial Surveillance Branch is collecting and reacting to information. This report (Task 1.11 and 8) was prepared to review existing data management practices, identify any weaknesses that may exist, and propose modifications to these practices that can provide the basis for developing a new data management system.

II. OBJECTIVES

Our objectives in developing this report were to:

- understand existing data management practices.
- identify weaknesses in the data management practices.
- develop revised data management requirements that:
  - reflect changes in the pretreatment program;
  - improve the efficiency of the Industrial Surveillance Branch; and
  - reduce the effort required by the city and industry to collect and provide information.
- provide the city with a working document that can be used as the basis for taking the next logical step toward developing a revised data management system.

III. APPROACH

Our approach for developing the data management needs of the Industrial Surveillance Branch included a thorough review of existing data management practices and the development of future data management needs based on the revised pretreatment program. Existing practices were reviewed to understand the flow of information within the Industrial Surveillance Branch and identify weaknesses within the existing system for collecting and using information. Future data management needs were identified to develop an effective system for improving industrial surveillance data management.

The review of existing data management practices was conducted by interviewing personnel within the Industrial Surveillance Branch to identify the information they collect and the use of this information. Additional interviews were conducted with personnel from other city departments that interact with the Industrial Surveillance Branch to identify information transfers between departments.

The forms used by Industrial Surveillance to collect and dispense information were also reviewed. A complete set of the forms are presented in Appendix A.

The results from our review of existing data management practices are presented in Chapter IV, Findings. This section presents detailed flow charts and supporting narrative to

describe the existing data management system. The section also presents a statement of the perceived problems with the existing system.

Based on the findings presented in Chapter IV and revisions of the basic pretreatment program, we have developed proposed system requirements. These requirements are presented in Chapter V, Recommendations, and include a statement of the objectives and benefits which should be sought in developing a new data management system and a description of the new system requirements. System requirements are presented in a flow-chart and narrative format, plus an extensive description of the actual input and output from the system.

The information provided in this report represents a first step by the city toward developing an improved data management system for the Industrial Surveillance Branch. Additional steps are required to implement the system, and these steps have been summarized in Chapter VI, Conclusions.

This report has been prepared with the assistance of the Industrial Surveillance Branch Chief and the Pretreatment Program Coordinator. Therefore, the report reflects their concerns about the existing system and their understanding of the need for a more efficient data management system.

IV. FINDINGS

This chapter summarizes our findings in reviewing the data management system used by the Industrial Surveillance Branch. The existing system is a manual data collection, filing, and manipulation system.

FLOW OF INFORMATION IN THE EXISTING SYSTEM

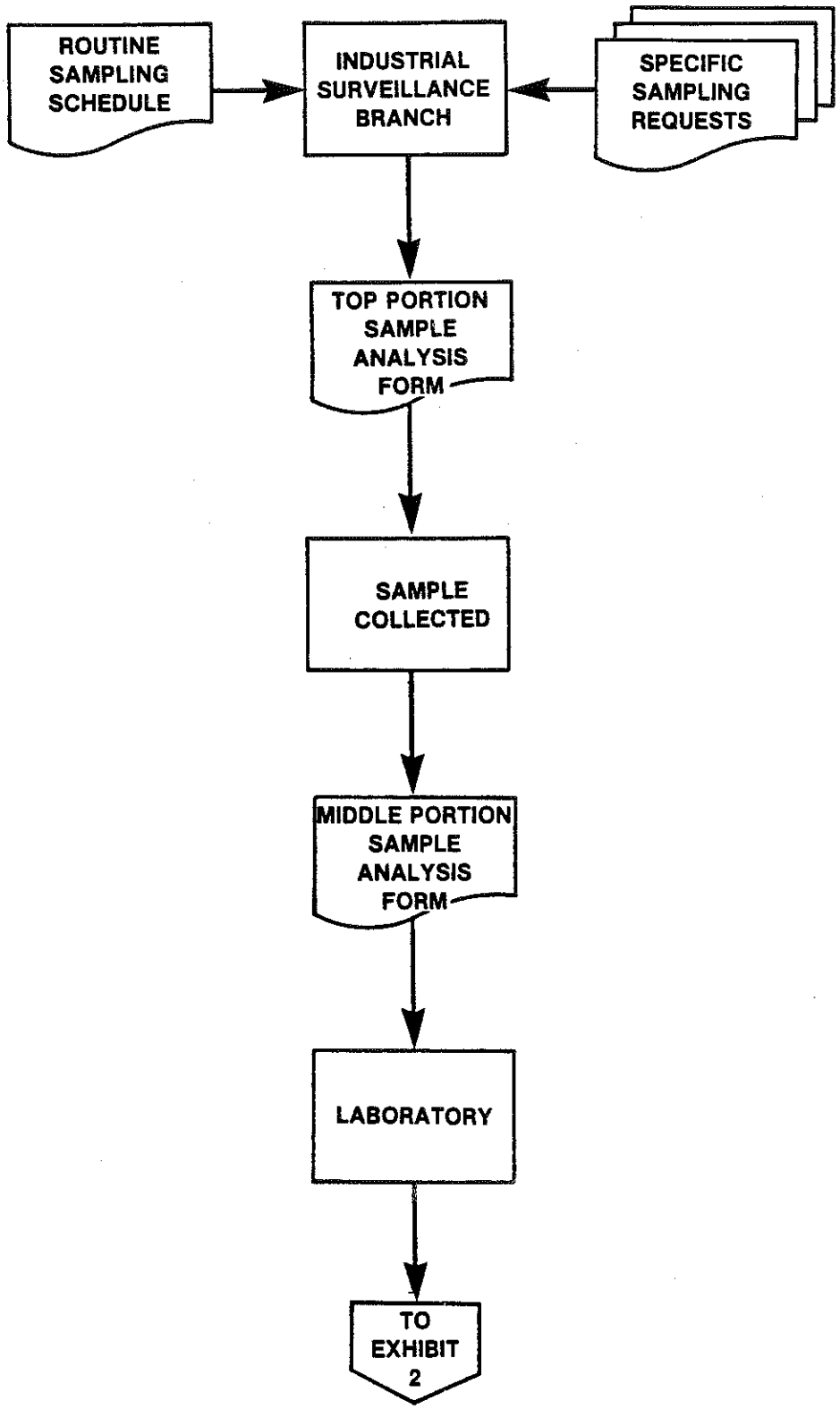
The following pages present a series of exhibits that describe the existing flow of information within the Industrial Surveillance Branch. Each exhibit presents a simplified flow chart describing the transfer of information. The flow charts have parallel narrative descriptions to clarify the intent of each exhibit.

The symbols used for each exhibit have been standardized to the extent that is practical. However, each symbol does not have an exclusive meaning and a legend of symbols is not provided for that reason.

Following the exhibits is a statement of the problems observed with the existing system of data management. Chapter V presents our recommendations for improving the existing system.

EXHIBIT 1

EXISTING SYSTEM
CITY SAMPLE COLLECTION



Industrial Surveillance Branch has an established routine for sampling permitted industries. Special sampling requests are made to take a non-routine sample at an industry or to sample outfalls, spills, and other emergency incidents.

A sample analysis form accompanies all samples collected by the city. Before a sample is collected, the top portion of the form is completed, identifying the industry, its location, and contact person.

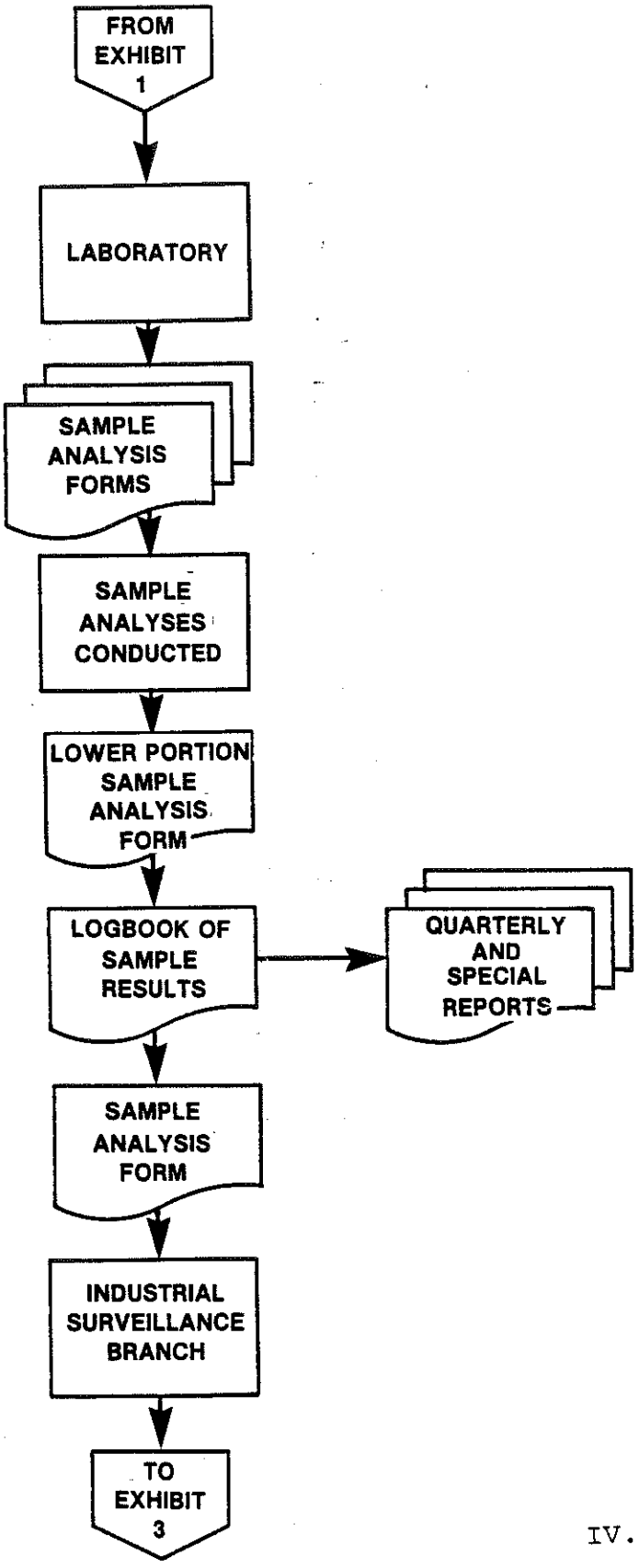
Samples are collected at the industrial or other location as a grab sample or as a composite sample from a sampler that was set the day before.

The middle portion of the sample analysis form is completed to identify the person sampling and field observations.

Once the samples from a daily schedule are collected, they are delivered to the laboratory with their corresponding sample analysis forms for analysis.

EXHIBIT 2

EXISTING SYSTEM
LABORATORY ANALYSIS OF CITY SAMPLES



Samples are placed in the designated laboratory area and sample analysis forms are filed according to the day the sample was collected.

Analyses are conducted on the sample by the liquid waste laboratory or a local private laboratory.

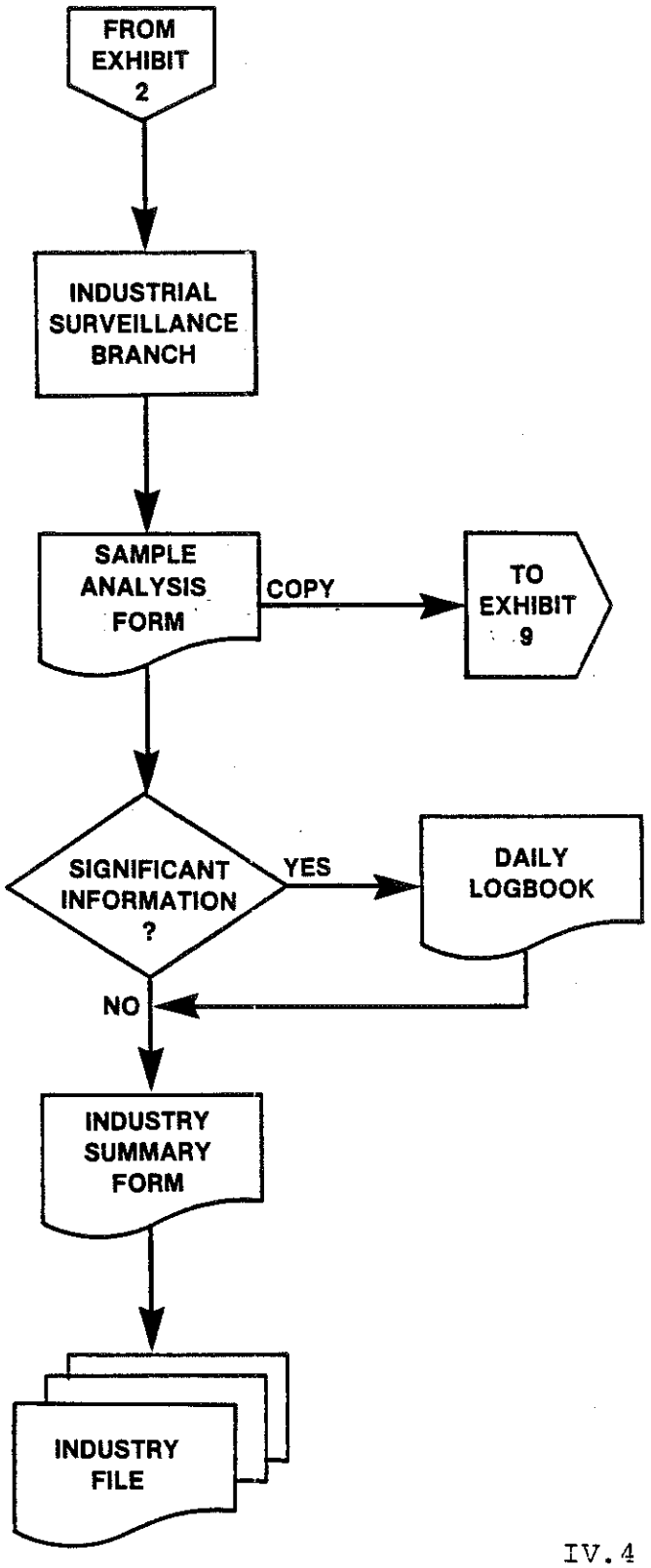
Laboratory results are recorded on the lower portion of the sample analysis form.

Laboratory results are transferred to a laboratory logbook. This logbook provides the basis for quarterly reports describing laboratory activities and special reports on unique analyses on non-industrial samples (e.g., CSO, spills, etc.)

Sample analysis forms are then sent to the Industrial Surveillance Branch.

EXHIBIT 3

EXISTING SYSTEM
RECORDING CITY SAMPLE RESULTS



Sample analysis forms are collected by the Industrial Surveillance Branch and copied for billing purposes.

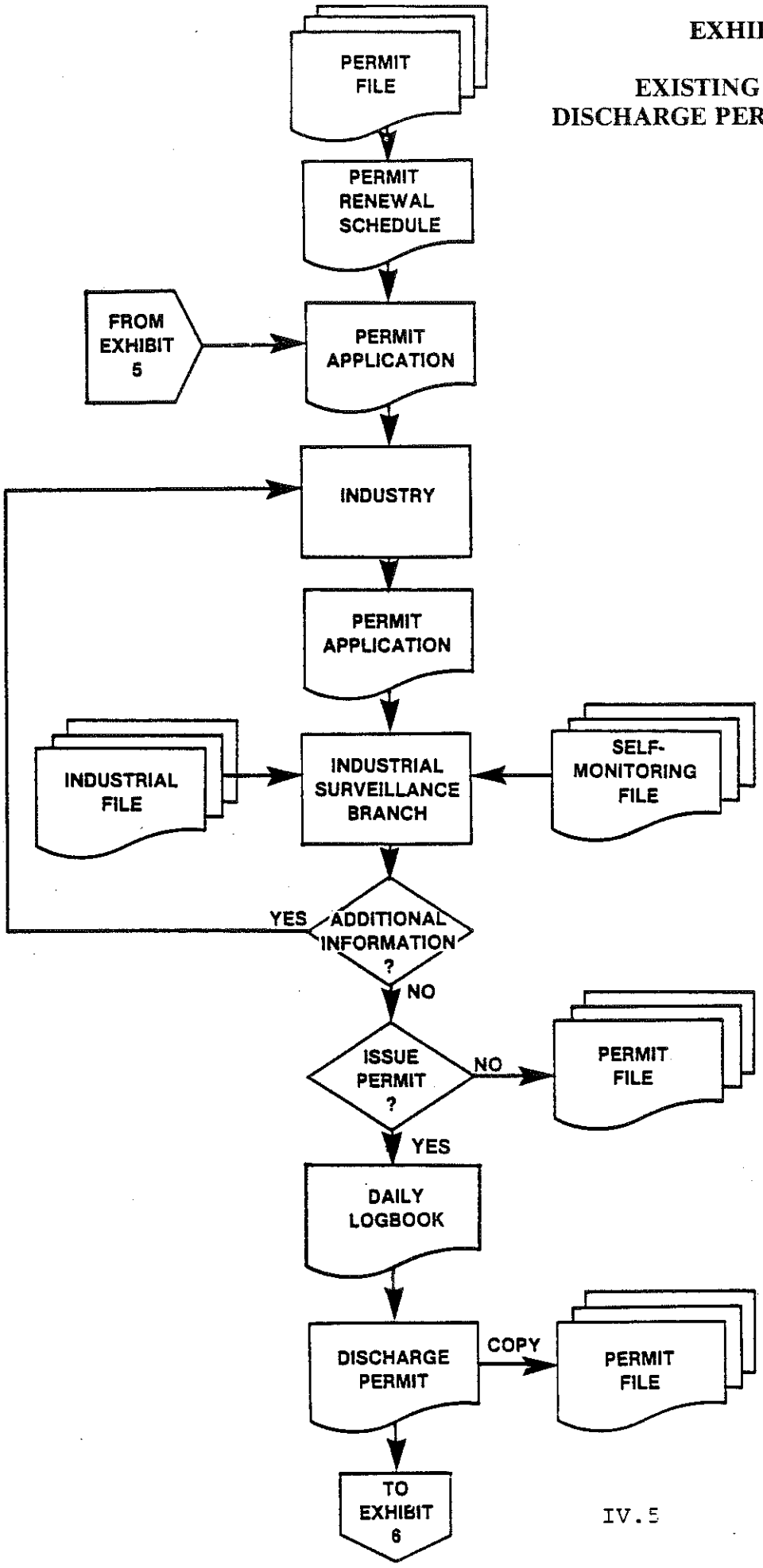
Significant or unusual information from sample analysis forms is recorded in a daily logbook that tracks the operations of the Industrial Surveillance Branch.

Laboratory results are transferred from each sample analysis form to individual industry summary forms.

Sample analysis forms and Industry Summary Forms are maintained by industry in the industry file.

EXHIBIT 4

EXISTING SYSTEM
DISCHARGE PERMIT ISSUANCE



The permit file is periodically reviewed to identify industries with expiring permits. These industries are listed on a permit renewal schedule.

Standard permit applications are sent to industries with expiring permits and new industries that may require a permit.

Individual industries (at the plant level) review operations and wastewater discharges to complete a permit application.

Completed permit applications are returned to the Industrial Surveillance Branch.

Permit applications are reviewed and compared with existing data on the industry in the industrial file and the self-monitoring file

A determination is made as to whether additional information is required for issuing a permit. Additional information is obtained from the industry to revise the permit application.

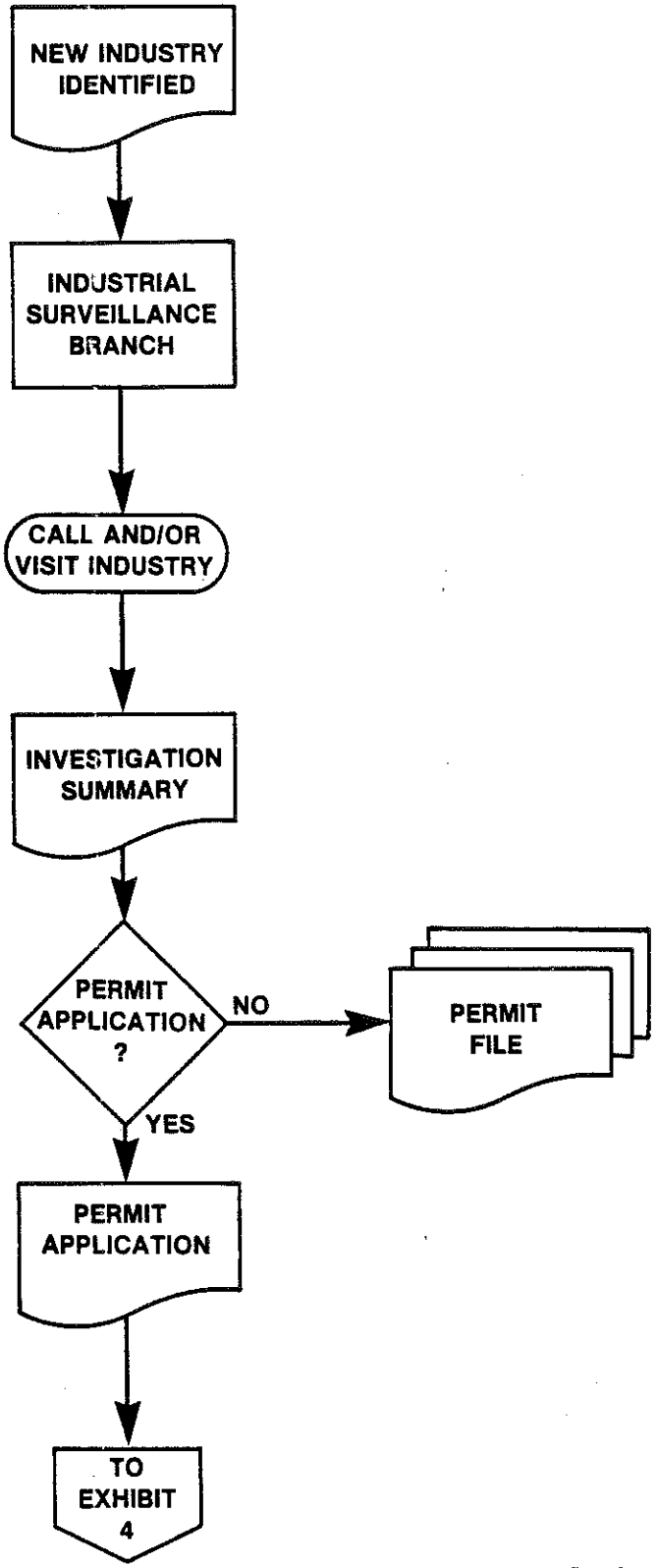
Once sufficient information is obtained, Industrial Surveillance decides whether a permit should be issued. If permit is not issued the information collected is stored in the permit file.

Permit activity is recorded in the daily logbook.

If a positive decision is reached, a discharge permit is issued to the industry and a copy of the permit is retained in the permit file.

EXHIBIT 5

EXISTING SYSTEM
NEW INDUSTRY IDENTIFICATION



New industries within the city are identified by a variety of means, including: observation, Billing Department, new sewer connection, etc.

The Industrial Surveillance Branch collects information on new industries.

A call and/or visit is made to the new industry to learn more about their operation.

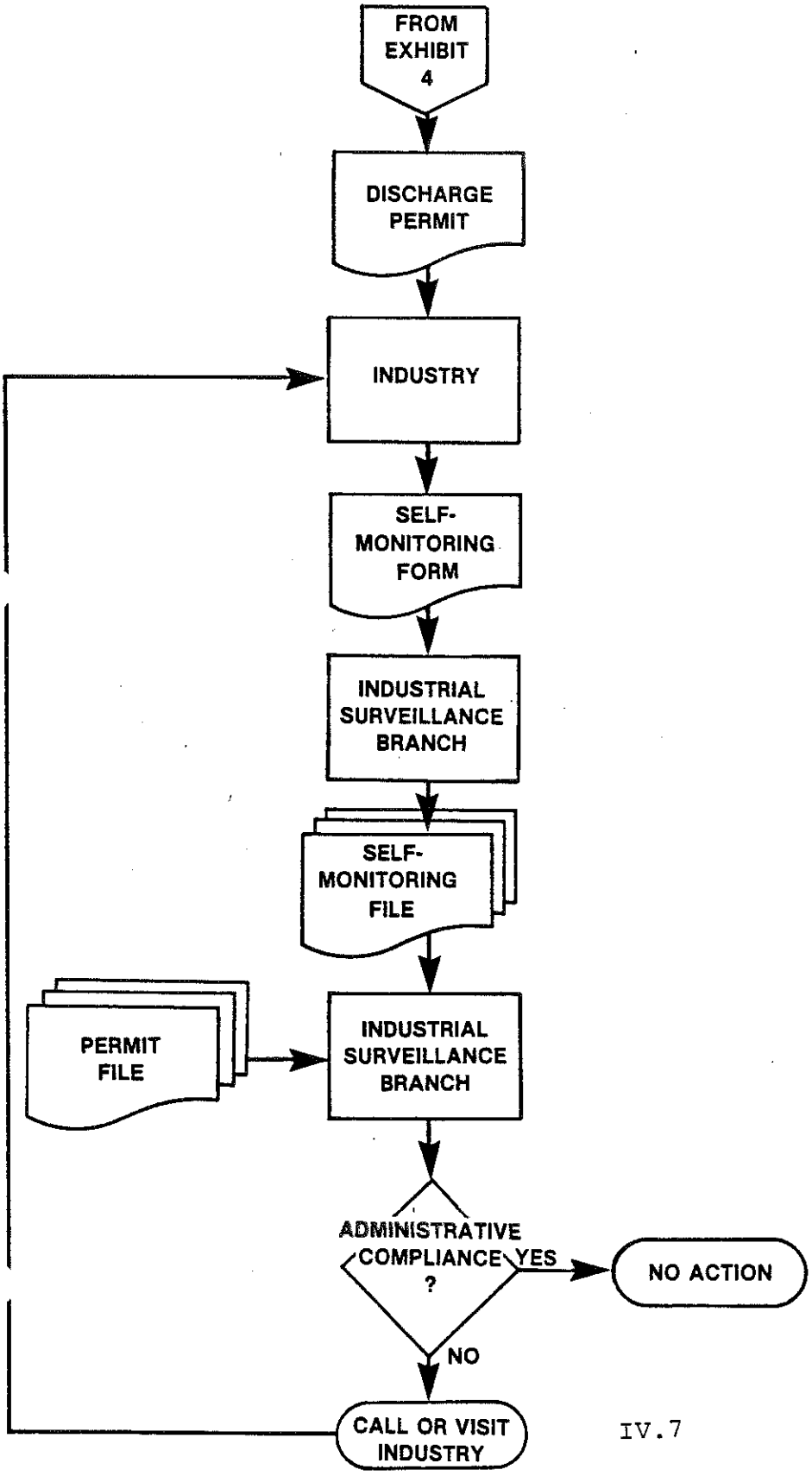
An informal report is prepared to summarize the investigation.

A determination is made as to whether a permit application should be prepared by the industry. If not, the investigation summary is stored in the permit file.

When a permit application is required, the standard permit application is forwarded to the industry.

EXHIBIT 6

EXISTING SYSTEM
INDUSTRIAL SELF-MONITORING



Discharge permits are issued to individual industries, A permit specifies discharge limitations and reporting requirements.

Industry refers to its permit to determine when the wastewater should be sampled and analyzed.

Wastewater analyses are reported on a standard self-monitoring form.

Self-monitoring forms are received by the Industrial Surveillance Branch.

Self-monitoring forms are stored by industry in a self-monitoring file.

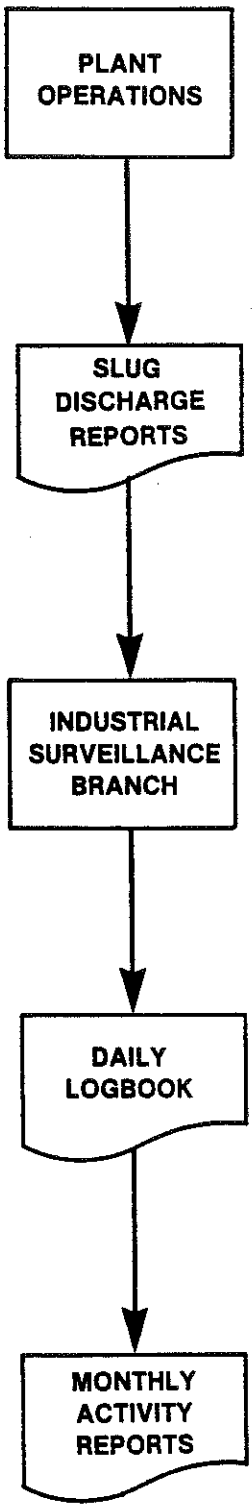
The Industrial Surveillance Branch periodically reviews self-monitoring and permit files to determine if industries are meeting administrative self-monitoring requirements.

A decision is reached as to whether each industry is in administrative compliance. If yes, no further action is taken.

If the industry is not in administrative compliance, a call or visit is made to the industry to elicit self-monitoring reports.

EXHIBIT 7

EXISTING SYSTEM
DAILY ACTIVITIES LOGBOOK



Slug discharges which are observed by plant operators are reported on slug discharge reports.

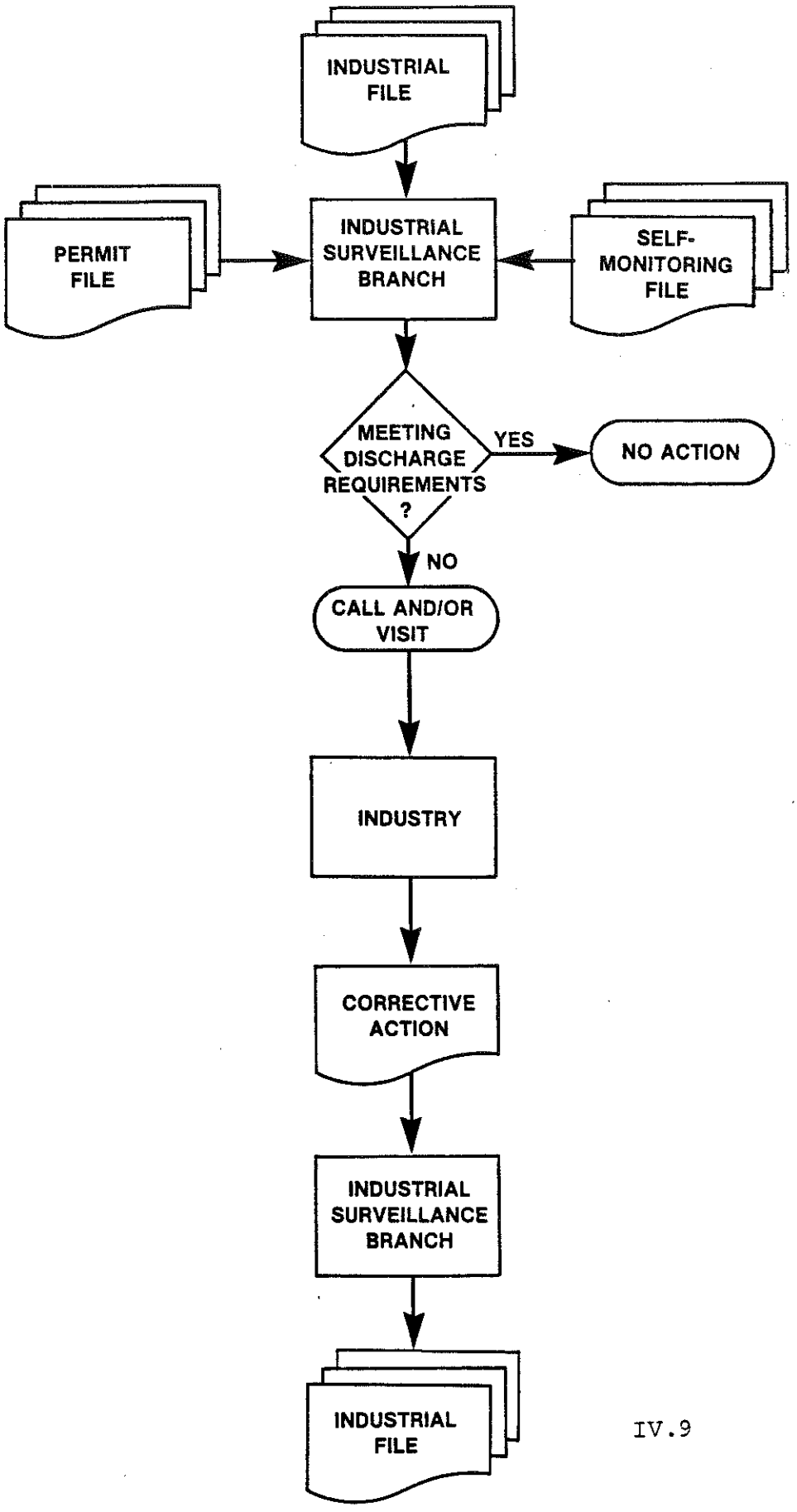
The slug discharge reports are sent to the Industrial Surveillance Branch.

Slug discharges and follow-up efforts are recorded in the daily logbook, which also includes a record of all other significant branch activities.

The daily logbook is used to prepared monthly reports to summarize the activities of the branch.

EXHIBIT 8

EXISTING SYSTEM
DISCHARGE COMPLIANCE REVIEW



The Industrial Surveillance Branch periodically reviews the Permit, Industrial, and Self-Monitoring Files to check if individual industries are meeting discharge requirements.

If the industry is meeting discharge requirements, no action is taken.

When discharge requirements are not being met, a call and/or visit is made to the industry to correct the situation.

The industry reviews why it is not meeting discharge requirements.

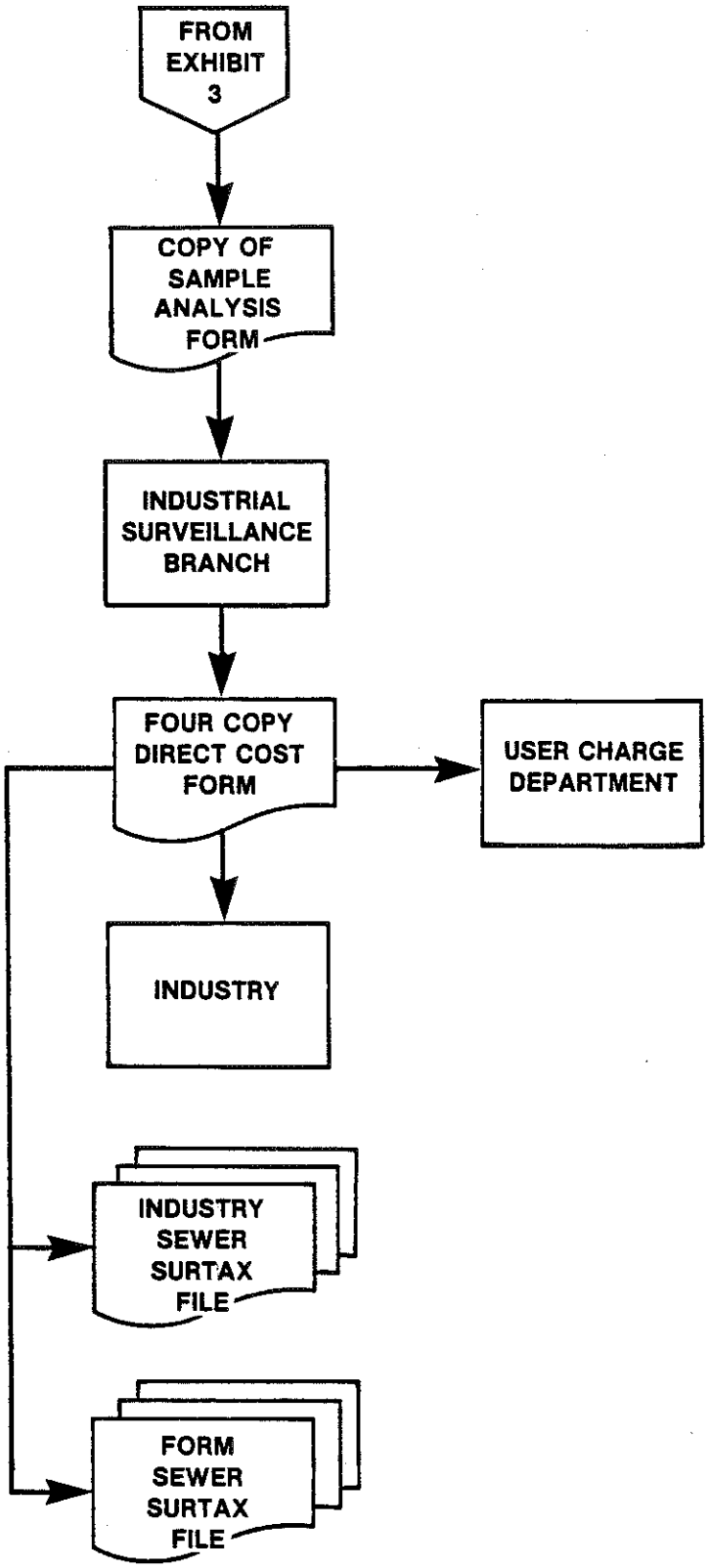
The industry must prepare and submit a statement describing the corrective actions it will take.

The Industrial Surveillance Branch receives the corrective action statement.

The statements are stored by industry in the Industrial File.

EXHIBIT 9

EXISTING SYSTEM
INDUSTRY CHARGES FOR CITY SAMPLING



A separate copy of each sample analysis form is made.

The Industrial Surveillance Branch maintains a copy of sample analysis forms to calculate sampling charges for city sampling.

Sampling charges are calculated on a four copy direct cost form. The first copy is sent to the user charge department for billing.

The second copy is sent to the industry being charged.

The third copy is maintained in a sewer surtax file by industry.

The fourth copy is maintained in a sewer surtax file by form number.

STATEMENT OF PROBLEMS WITH THE EXISTING SYSTEM

The following items are problems that were observed in the processing of information within the Industrial Surveillance Branch:

- All field data are stored and manipulated manually.
- Sampling routines are developed manually on a non-random basis. Available information is not used to its fullest extent to direct resources toward the worst problems by sampling chronic violators.
- Laboratory results are transferred manually to various uses throughout the Department of Public Works. The results are transferred to:
  - the laboratory log book;
  - industry summary forms; and
  - direct cost forms.
- A number of permitted industries are required to submit identical discharge data to the Industrial Surveillance Branch and the User Charge Department. These submittals are not cross-checked or compared with city sampling data.
- Information about new industries is not being transferred routinely to the Industrial Surveillance Branch. Potential information sources include:
  - water company account changes;
  - building permits; and
  - sewer connection permits.
- Compliance with permit requirements must be reviewed manually by comparing three separate files on an industry.
- Bills for sampling charges must be prepared manually and then directed to the industry and to the User Charge Department.
- An industry's compliance history is not readily available for permit renewal reviews.

- Summary level information is not routinely available to the branch chief.

- Available information on permitted industries cannot be rapidly sorted to identify chronic violators, dischargers of specific pollutants, categories of industries, etc. This creates significant problems in identifying slug dischargers and responding to emergencies.

- Influent data to the treatment facilities are not readily available.

V. RECOMMENDATIONS

This chapter presents our recommendations for improving the existing data management system. The chapter builds upon the information presented in the previous chapter and develops the basis for a new data management system.

In developing recommendations we have assumed that a new data management system would be automated. We have found that the most significant problems with the existing system are not the information collected or the manner of information collection and use. The most significant problems are directly related to the immense volume of information that is collected and the labor required to reduce this information to a meaningful form.

These problems can be mitigated by reducing the amount of information collected or by developing an automated data management system. Our review of the situation indicated that under the best circumstances the amount of information collected will increase; therefore, an automated system is desirable and our recommendations were developed on this basis.

Our recommendations are organized to present:

- a statement of the objectives and benefits in developing the proposed system;
- a series of proposed flow charts to describe the proposed system;
- a description of the major inputs and outputs from the system; and
- a presentation of the data groups and data elements that are used in the system.

STATEMENT OF OBJECTIVES AND ANTICIPATED BENEFITS

Modification or replacement of information systems and procedures for the Industrial Surveillance Branch should:

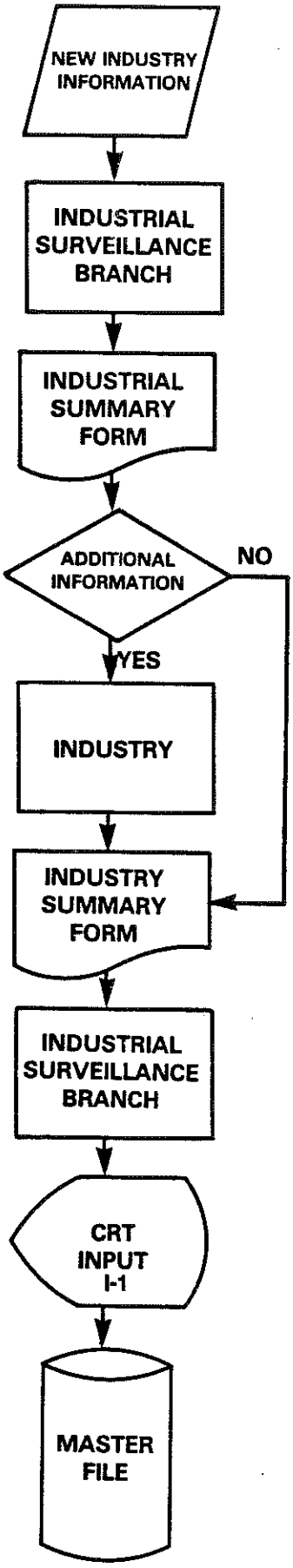
- Minimize manual filing and sorting of information.
- Allow sampling routines to be developed on a random basis so that available resources are efficiently directed to the most significant problems in the collection system.
- Improve information given to field crews regarding sampling procedures and requirements.
- Eliminate duplicate entries of information and duplicate information submittals.
- Improve the availability of information on new industrial dischargers.
- Coordinate the information available to the Industrial Surveillance Branch with the User Charge Department.
- Automate routine tasks such as the preparation of permit renewal notices.
- Maintain a running tabulation of an industry's discharge performance for comparison with required performance to identify discharge violations.
- Provide summary level reports to assist in managing the Industrial Surveillance Branch and to provide information to regulatory bodies.
- Allow rapid sorting capabilities so that industries can be identified by location, discharge, SIC code, drainage basis, or other appropriate parameter(s).
- Improve the branch chief's ability to prioritize the staff's activities to obtain optimal use of resources.
- Improve effectiveness in responding to slug discharges and identifying the source of the discharge.

- Provide a means to respond to emergencies with greater information about the emergency site and potential impacts in the sewer system.

- Provide greater access to operating information within the treatment plants.

EXHIBIT 10

PROPOSED SYSTEM
NEW INDUSTRY INFORMATION



New information about local industries becomes available through new building permits, new sewer connections, water company account changes, or other means.

The Industrial Surveillance Branch collects new industry information.

The new industry information is transferred to an Industry Summary form that collect standardized information for computer entry.

The Industry Summary form is reviewed to determine if additional information is required prior to computer entry.

When additional information is required the industry is contacted.

Complete Industry Summary forms are now ready for data entry.

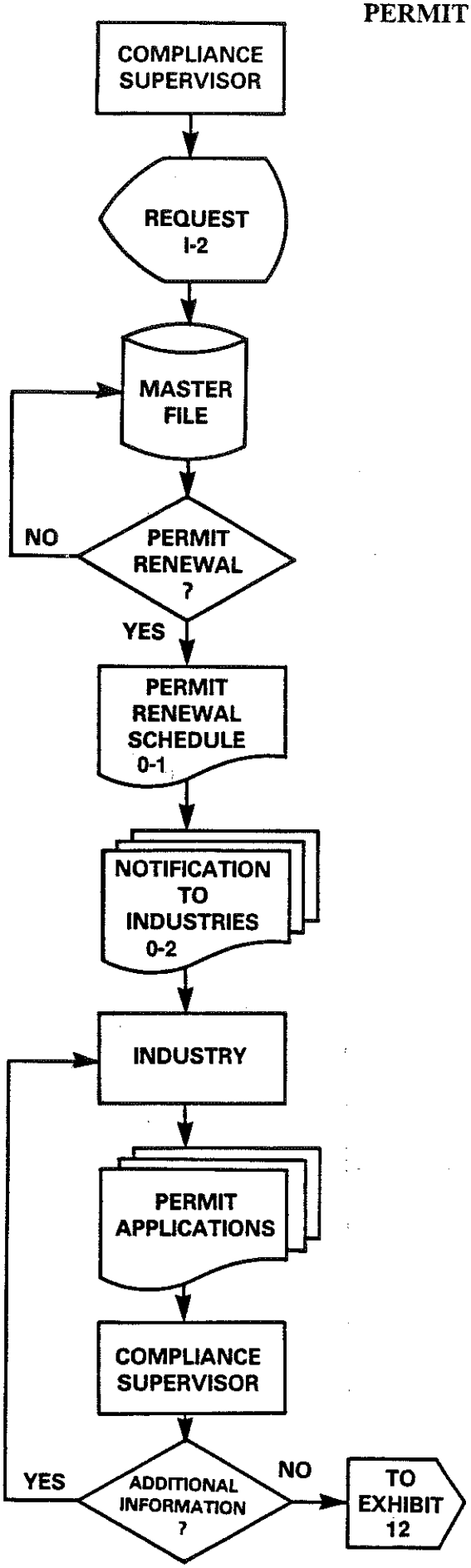
Industry Summary forms are forwarded within Industrial Surveillance to a data entry clerk.

New industry information is entered into the computer on a CRT.

The information is stored in the computer master file.

EXHIBIT 11

PROPOSED SYSTEM
PERMIT APPLICATIONS



The Industrial Surveillance Branch compliance supervisor requires a monthly schedule of industries that must renew their permit.

A request for permit renewals is made at a CRT for the current month.

The master file is accessed to identify industries requiring a permit renewal.

The criterion for selecting industries are the expiration data of the current permit and new industries that may require a permit.

A hardcopy of the current month's permit renewal schedule is output.

On request, notifications are output for individual industries.

Permit renewal notifications are sent to appropriate industries with a permit application.

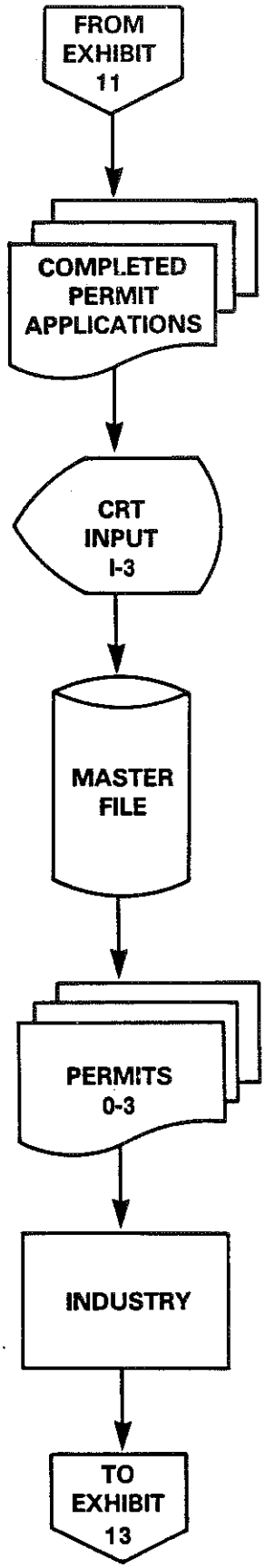
Industry completes a permit application ;and sends it to Industrial Surveillance.

Permit applications are reviewed by the compliance supervisor.

If the permit application is incomplete, the industry is contacted to provide additional information.

EXHIBIT 12

PROPOSED SYSTEM
PERMIT ISSUANCE



Once permit applications have been reviewed and approved, the information contained on the application is used to update the master file.

A data entry clerk uses a CRT to update industry information in the master file.

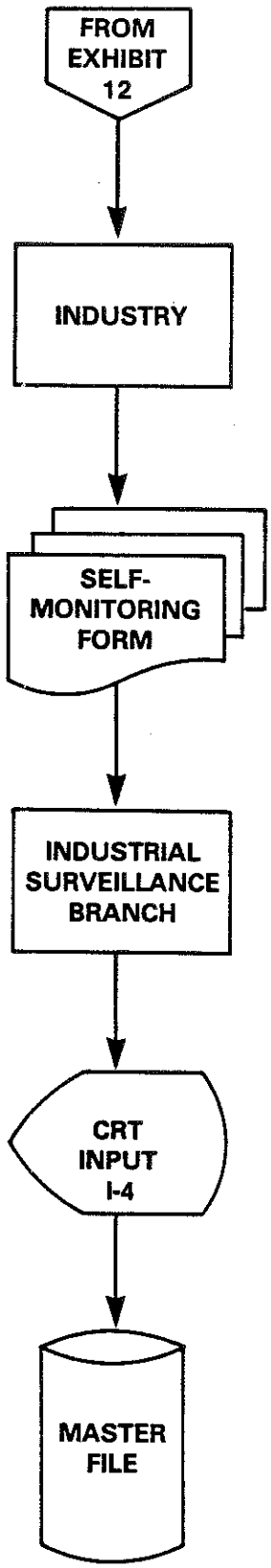
The master file is updated.

Individual permits are prepared at the conclusion of the input process, if required.

Permits are forwarded to the appropriate industries.

EXHIBIT 13

PROPOSED SYSTEM
INDUSTRY SELF-MONITORING



Permitted industries routinely collect and analyze their waste water discharge as required by their permit.

Analysis results are reported on a standard self-monitoring form.

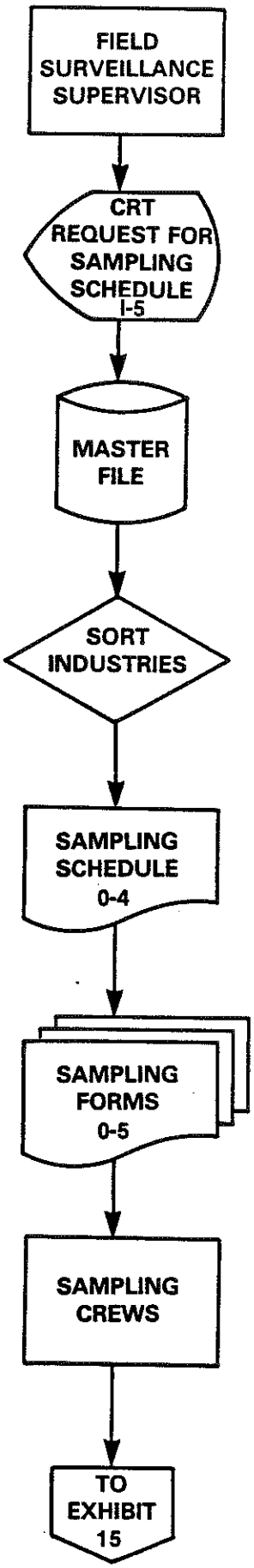
Self-monitoring forms are sent to the Industrial Surveillance Branch.

The information contained on self-monitoring forms is entered into the computer by a data entry clerk.

The information is stored in the master file.

EXHIBIT 14

PROPOSED SYSTEM
CITY SAMPLING: SCHEDULE



The Field Surveillance Supervisor has a weekly need to develop sampling schedules for the sampling crews.

A CRT request is made for a sampling schedule.

The master file is accessed to develop a sampling schedule.

The schedule is developed according to industry location, sampling schedule and history, sampling crew capacity, and random selection.

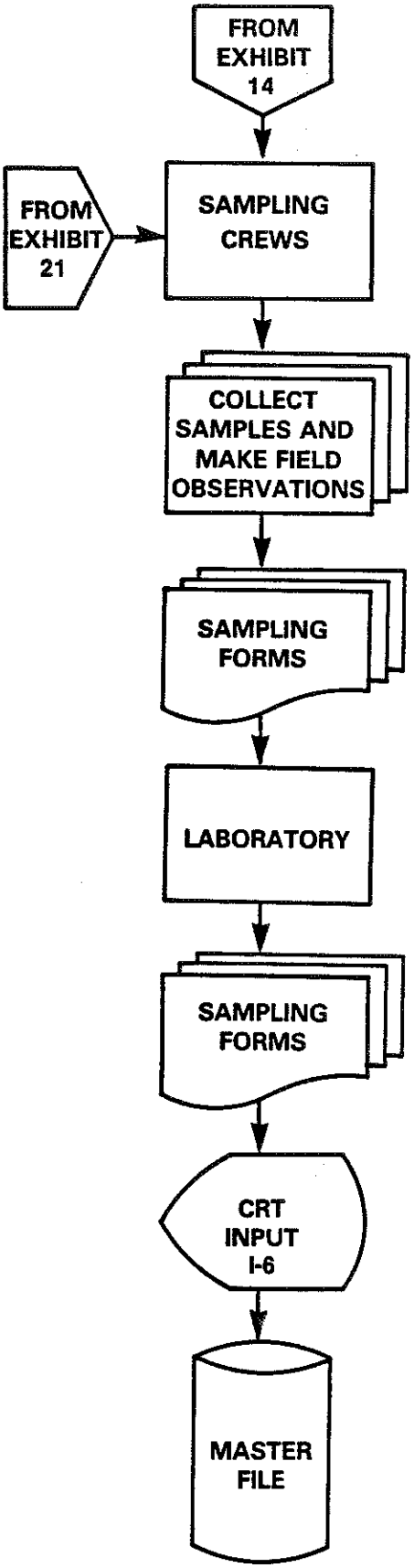
A summary level sampling schedule is prepared.

Individual sampling forms are prepared for each industry on the weekly sampling schedule.

The Field Surveillance Supervisor uses the sampling schedule of related forms to direct the weekly activities of sampling crews.

EXHIBIT 15

PROPOSED SYSTEM
CITY SAMPLING: COLLECTION AND ANALYSIS



Sampling crews, under the direction of the Field Surveillance Supervisor, carry out the week's sampling schedule.

Sample are collected at appropriate industrial locations.

Field observations are recorded by the sampling crew on each sampling form.

Sampling forms and samples are delivered to the laboratory for analysis.

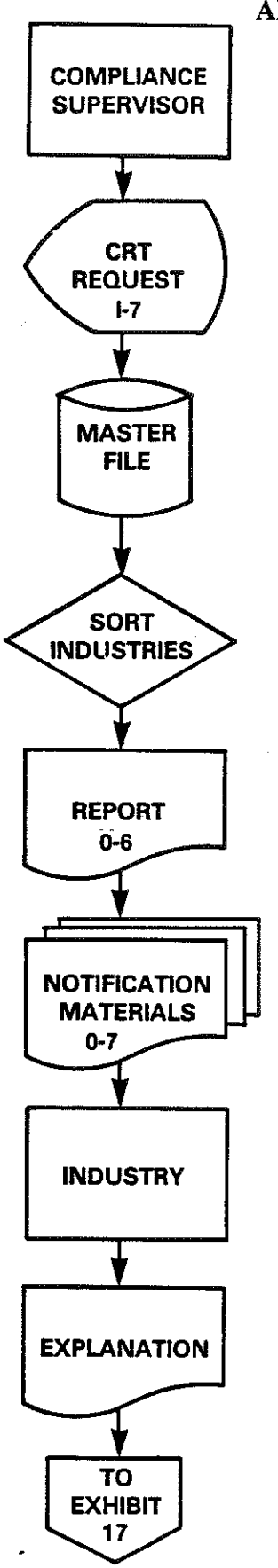
Laboratory results are recorded on sampling forms.

All new information from the sampling forms is entered on a CRT.

The information is stored in the master file.

EXHIBIT 16

PROPOSED SYSTEM
ADMINISTRATIVE COMPLIANCE REVIEW



The Compliance Supervisor must conduct a monthly review of industries for administrative compliance with discharge permits.

A CRT request is made for the administrative compliance report and notification materials.

The master file is accessed to respond to the request.

Industries are sorted to identify the industries that did not submit self-monitoring reports as required during the specified time period or reported significantly different results from city monitoring.

The industries which are not in administrative compliance are listed on the report.

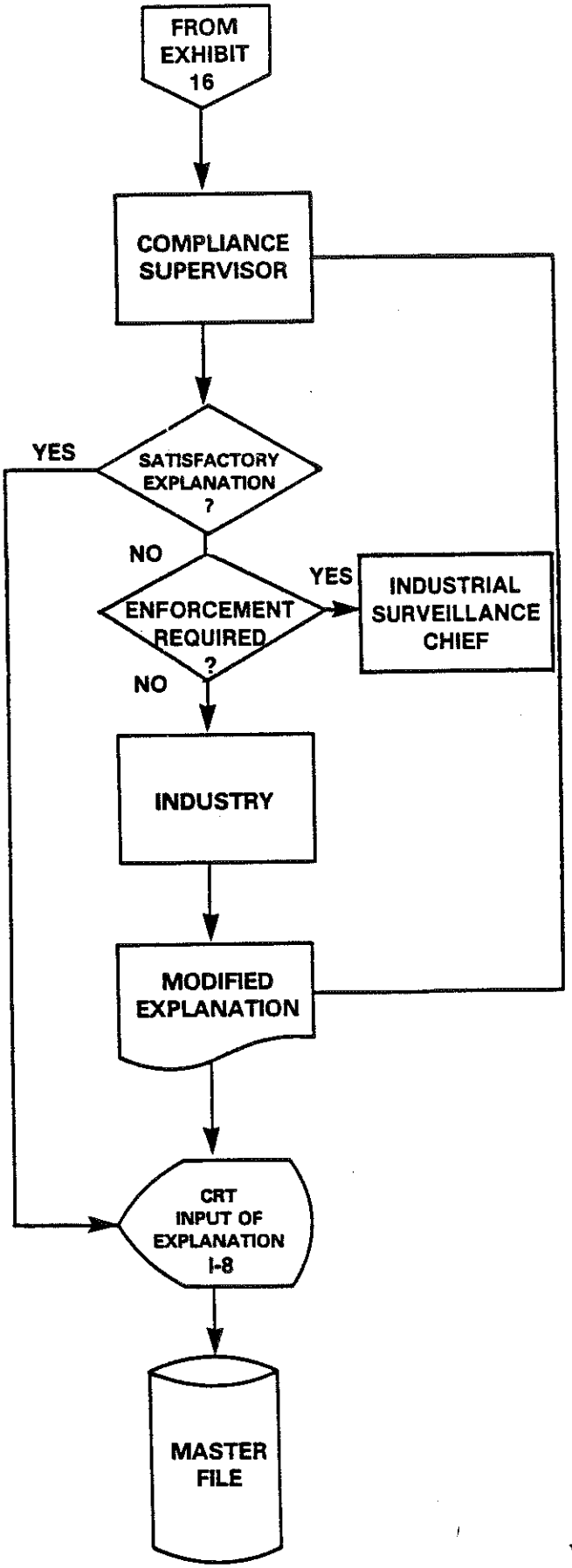
Notification materials are prepared for individual industries listed on the report.

Notifications are sent to the individual industries.

Industries prepare a written explanation and submit it to the compliance supervisor.

EXHIBIT 17

PROPOSED SYSTEM
ADMINISTRATIVE COMPLIANCE REVIEW (CONT.)



The Compliance Supervisor receives explanations from industry, describing reasons for administrative non-compliance.

Each explanation is reviewed to determine whether the explanation is satisfactory.

The Compliance Supervisor must decide whether an enforcement action is required. If action is required the case is referred to the Branch Chief.

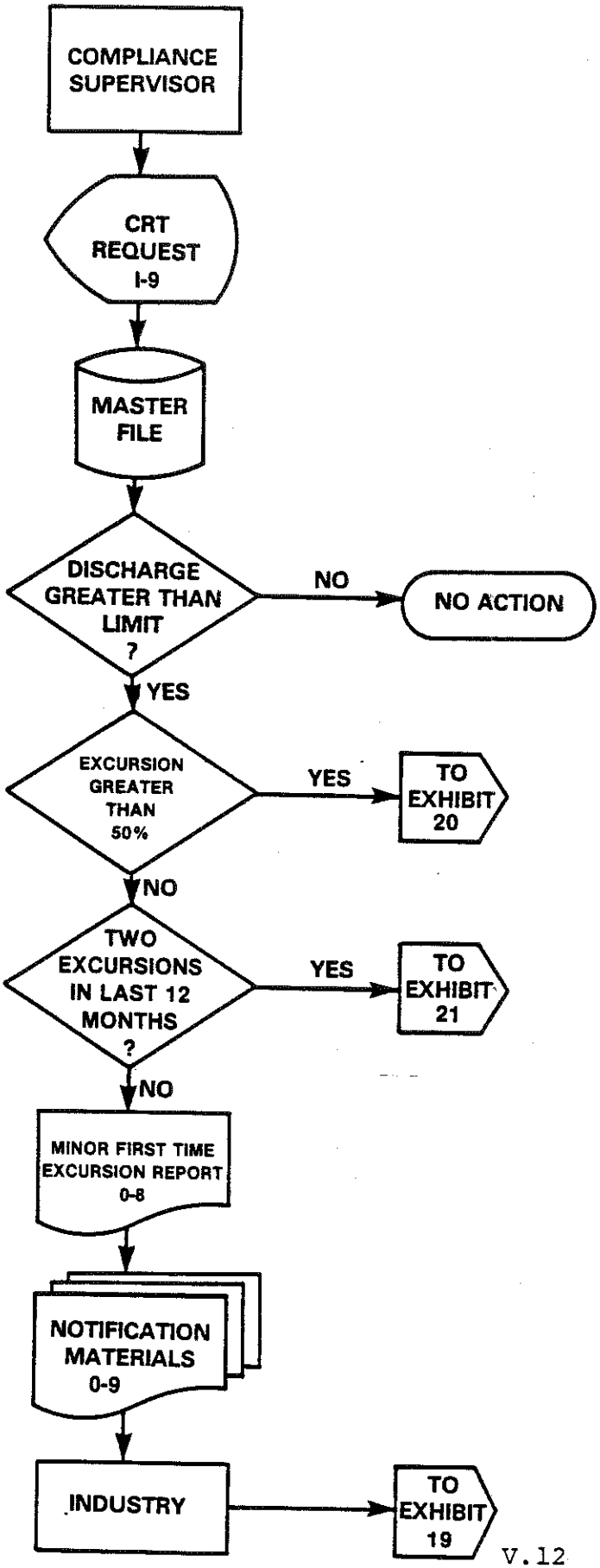
If the explanation is not satisfactory, the industry is contacted directly to obtain more information.

The modified explanation is returned to the Compliance Supervisor for review.

Satisfactory explanations are noted in the master file via CRT input.

EXHIBIT 18

PROPOSED SYSTEM
DISCHARGE COMPLIANCE REVIEW



The Compliance Supervisor must conduct a routine review of industries to identify city or self-monitoring sample results which indicate non-compliance with discharge standards.

A CRT request is made for discharge compliance reports and notification materials for all discharges that are out of compliance

The master file is accessed to identify non-compliance.

Current wastewater analyses from city monitoring and self-monitoring are compared to discharge limitations to identify industries that are not in compliance.

The discharges are divided into two groups according to whether their excursion is greater than 50% over the discharge standard or not.

Industries that are not in compliance are divided into two groups according to whether they have had two previous excursions during the past twelve months or not.

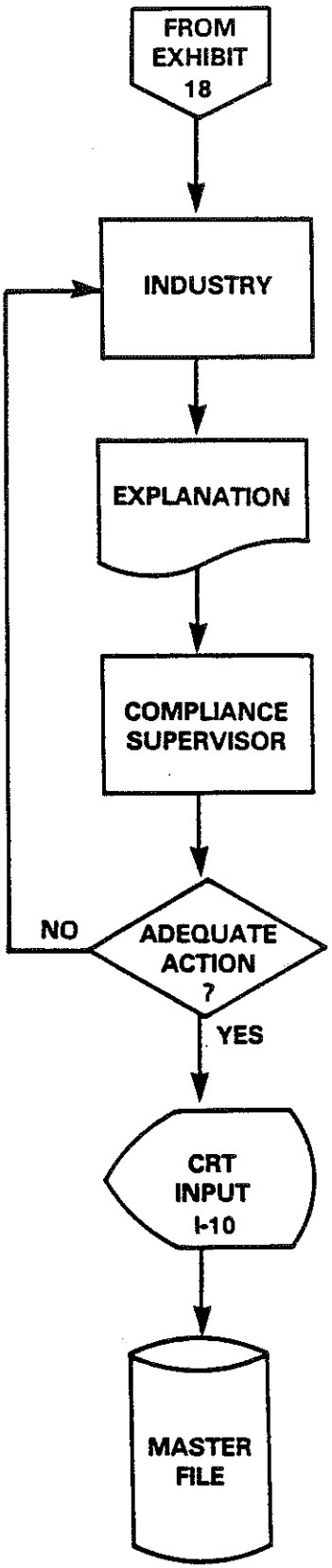
A report is produced to identify the industries that have a minor excursion for the first or second time.

Notification materials are prepared and sent to all industries with minor first or second time excursions.

Each industry receives notification of their excursion which requests action within a specified time period.

EXHIBIT 19

PROPOSED SYSTEM
DISCHARGE COMPLIANCE REVIEW (CONT.)



Industry reviews reason for not being in compliance and prepares a response.

The industry's response is prepared in writing.

The Compliance Supervisor receives the industry's explanation and proposed action plan.

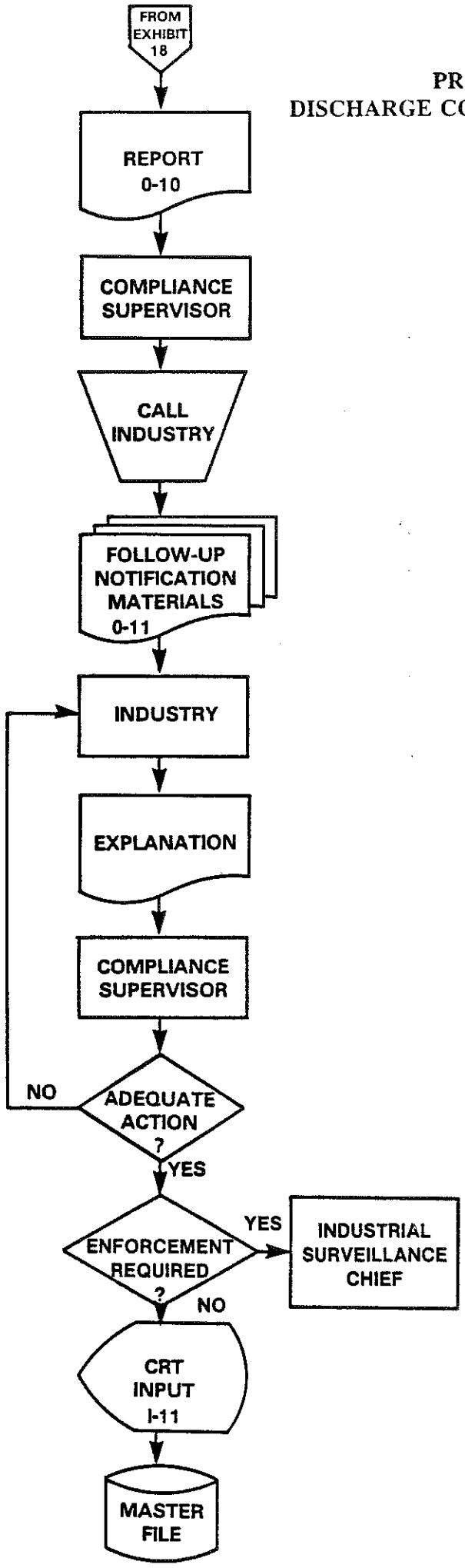
The plan is reviewed to determine whether an adequate response has been received. If not, the industry is contacted to resolve differences.

Adequate responses are entered into the computer via CRT.

The responses are stored in the master file.

EXHIBIT 20

PROPOSED SYSTEM
DISCHARGE COMPLIANCE REVIEW (CONT.)



A report is produced to identify significant excursions (greater than 50% over the standard).

The Compliance Supervisor receives a copy of the report.

The supervisors first action is to call industries listed on the report to discuss non-compliance.

Each telephone call is followed by a mailing to the individual industries requesting a written explanation and proposed action to resolve the problem.

Industry evaluates the situation.

A written response is prepared by the industry.

The response is received by the Compliance Supervisor.

The supervisor evaluates whether adequate action has been taken by the industry. If no, the industry is contacted to resolve differences.

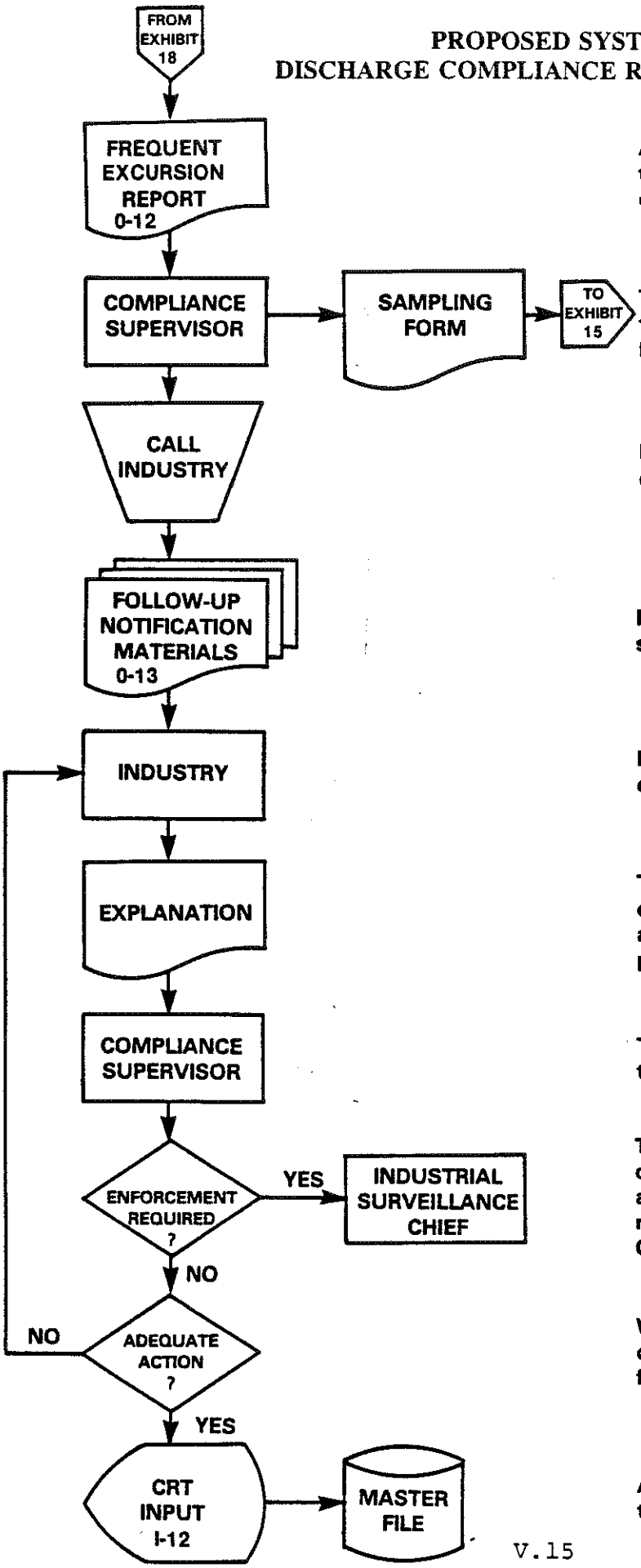
The industry's situation is reviewed to determine whether an enforcement action is required. If yes, the case is referred to the Industrial Surveillance Chief.

Adequate responses are entered into the computer via CRT.

The responses are stored in the master file.

EXHIBIT 21

PROPOSED SYSTEM
DISCHARGE COMPLIANCE REVIEW (CONT.)



A frequent excursion report is prepared to list industries that have at least two other violations in the past 12 months.

The Compliance Supervisor receives the report and prepares a sampling form as required.

Industry is called to notify them of the discharge excursion.

Follow-up materials are prepared to be sent to the industry.

Industry evaluates the situation to develop a corrective course of action.

The industry prepares a written explanation and proposed course of action to resolve their discharge problem.

The Compliance Supervisor receives the industry response.

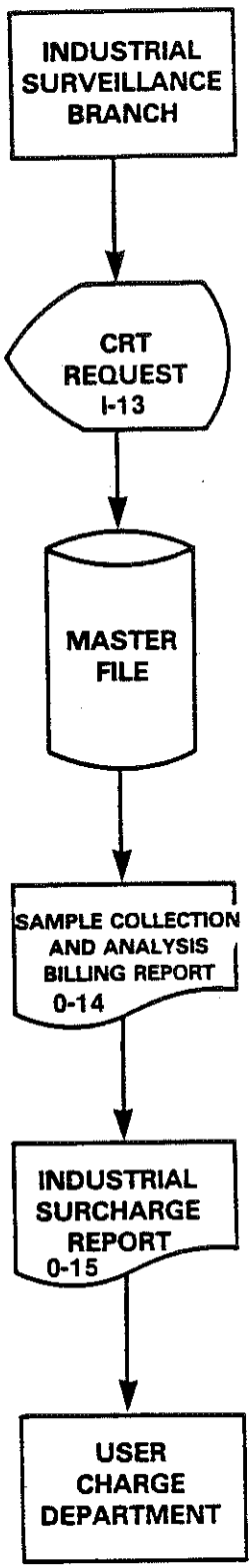
The industry's situation is evaluated to determine whether an enforcement action is required. If yes, the case is referred to the Industrial Surveillance Chief.

When enforcement is not required, a decision is rendered as to whether further action is required of industry.

Adequate responses are entered into the master file via CRT.

EXHIBIT 22

PROPOSED SYSTEM
BILLING



The Industrial Surveillance Branch requests billing reports.

A CRT request is made.

The master file is accessed to calculate current charges.

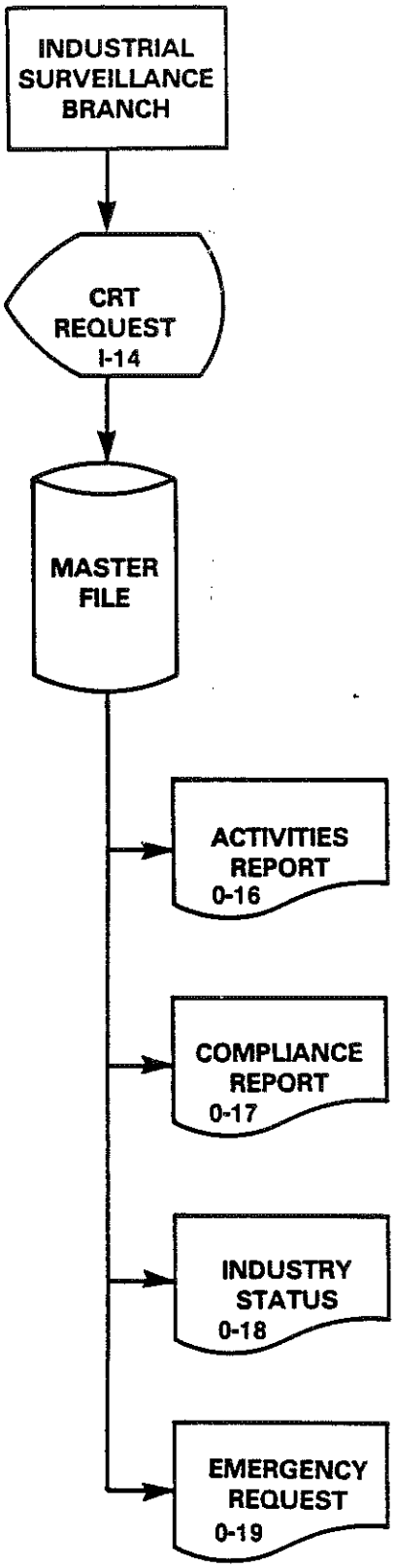
A report is produced to summarize industrial charges for sample collection and analysis by the city.

A report is produced to summarize industrial surcharges.

Both reports are transmitted to the user charge department for billing purposes.

EXHIBIT 23

PROPOSED SYSTEM
SPECIAL REQUESTS



The Industrial Surveillance Branch has an ongoing need to access the data base for special information.

A CRT request is made.

Based on the request, the master file is accessed to generate an appropriate report.

An activities report is produced to summarize Branch activities during a special period. Activities include: permitting, sampling, analysis, compliance and enforcement.

The compliance report identifies industries that are having compliance problems.

The industry status report is a specific report describing the recent activities of an industry.

Emergency request is a summary level report that presents a list of industries based on designated sorting criteria, and as materials discharged, materials stored on site, location, SIC code, etc.

EXHIBIT 24

DATA AND SYSTEMS INTERFACE REQUIREMENTS

DATA GROUP	PROCESSING CYCLES									
	NEW INDUSTRY INFORMATION	PERMIT APPLICATIONS	PERMIT ISSUANCE	INDUSTRY SELF-MONITORING	CITY SAMPLING – SCHEDULE	CITY SAMPLING – COLLECTING AND ANALYSIS	ADMINISTRATIVE COMPLIANCE REVIEW	DISCHARGE COMPLIANCE REVIEW	BILLING	SPECIAL REQUESTS
D-1 INDUSTRY IDENTIFICATION	X	X	X		X		X	X	X	X
D-2 INDUSTRY DESCRIPTION		X			X					X
D-3 SAMPLING INFORMATION		X			X	X				X
D-4 PERMIT INFORMATION		X	X	X	X		X	X		X
D-5 DISCHARGE INFORMATION		X		X						X
D-6 WASTEWATER QUALITY INFORMATION		X		X		X	X	X	X	X
D-7 ORDINANCE LIMITATIONS								X		X
D-8 SAMPLING SCHEDULE					X					X
D-9 BILLING STATISTICS									X	X

EXHIBIT 25

DATA BASE MATRIX

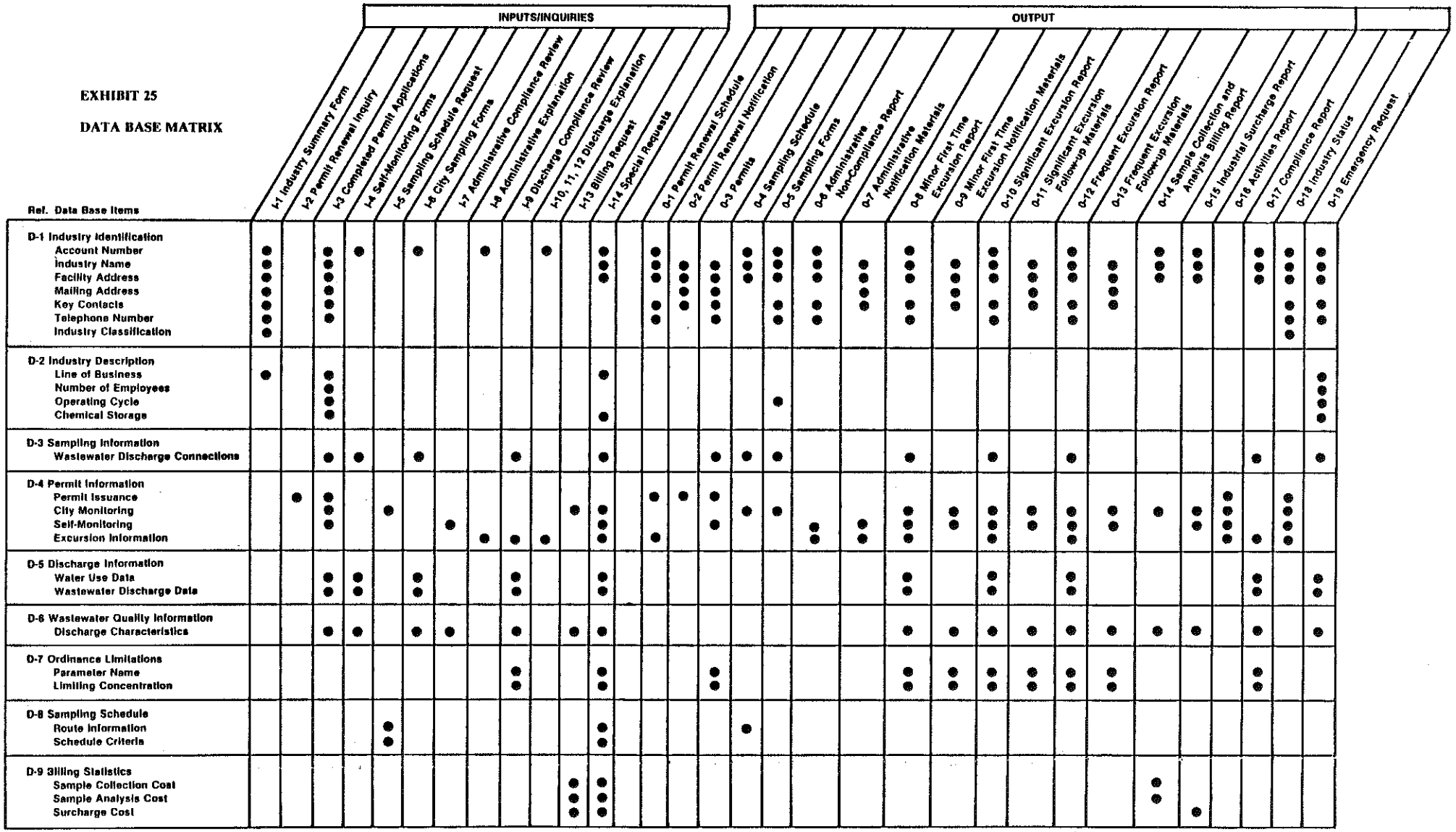


EXHIBIT 26

SUMMARY OF COMPUTER INPUT REQUIREMENTS

Ref.	Input Transaction	Source	Function	Frequency	Estimated Annual Volume	Media Options
I-1	New Industry Information	- Building permits - Water company - Business directories	To describe a new industry or update information on an existing industry	As needed	100	CRT
I-2	Permit Renewal Inquiry	- Compliance Supervisor	To identify industries that require a permit renewal	Monthly	12	CRT
I-3	Permit Applications	- Industry	To provide information on an industry's potential discharge	As needed	75	CRT
I-4	Self-monitoring Reports	- Industry	To report samples collected by industry	As needed	1,000	CRT
I-5	Sampling Schedule Request	- Field Surveillance Supervisor	To select industries to be sampled	Weekly	52	CRT
I-6	Completed City Sampling Forms	- Sampling crews and laboratory	To report samples collected by the city	As needed	2,500	CRT
I-7	Adminstrative Compliance Review Request	- Compliance Supervisor	To identify industries that are not in administrative compliance	Monthly	12	CRT
I-8	Administrative Explanation	- Industry	To record the explanation given for adminstrative non-compliance	As needed	250	CRT
I-9	Discharge Compliance Review	- Compliance Supervisor	To request discharge compliance reports	Monthly	12	CRT
I-10, 11,12	Discharge Explanations	- Industry	To record the explanations given for non-compliance	As needed	250	CRT
I-13	Billing Request	- Industrial surveillance	To request current bills for the user charge department	Monthly	12	CRT
I-14	Special Requests	- Industrial surveillance	To request specific special reports	As needed	100	CRT

EXHIBIT 27

SUMMARY OF COMPUTER OUTPUT REQUIREMENTS

Ref.	Output	Description	Purpose	Frequency	Estimated Annual Volume
O-1	Permit Renewal Schedule	Summary report listing industries that require permit renewal	Working document for compliance supervisor	Monthly	12
O-2	Permit Renewal Notices	A letter to industry	To notify industry of permit renewal requirements	Monthly	75
O-3	Permits	Industrial discharge permit	To quantify discharge limitations	As needed	75
O-4	Sampling Schedule	Summary report listing industries to be sampled	To identify current sampling schedule	Weekly	52
O-5	Sampling Forms	Working form for sample collection activities	To provide sampling crews with sampling requirements for each industry listed on the sampling schedule	Weekly	2,500
O-6,8, 10,12	Non-Compliance Reports	Listing of industries that are out of compliance	To provide the compliance supervisor with working documents describing non-compliance	Monthly (each)	48
O-7,9, 11,13	Non-Compliance Notification Materials	Letters to industry that describe non-compliance	To notify industry of observed non-compliance	As needed	500
O-14	Sample Collection and Analysis Billing Report	Listing of industrial charges for city monitoring	To provide billing information to the user charge department	Monthly	12
O-15	Industrial Surcharge Report	Listing of industrial surcharges	To provide billing information to the user charge department	Monthly	12
O-16	Activities Report	Summary report of industrial surveillance activities	To identify current activities of the department	Monthly	12
O-17	Compliance Report	Listing of industries that are having compliance problems	To identify problem industries	Monthly	12
O-18	Industry Status	Report describing recent activities of a specific industry	To provide a general update on a specific industry	As needed	250
O-19	Emergency Request	Listing of industries sorted by one or more criteria, such as location, chemical storage, discharge, etc.	To provide an emergency mechanism for identifying industries	As needed	250

D-1 Industry Identification

- Account Number
- Industry Name
- Facility Address
  - Street Address
  - City
  - Zip Code
  - Special Directions
- Mailing Address
  - Street or Mailing Address
  - City
  - State
  - Zip Code
- Key Contacts
  - Routine Contact
  - Emergency Contact
  - Back-up Emergency Contact
- Telephone Numbers
  - General Business Number
  - Routine Contact Number
  - Emergency Contact Number
  - Back-up Emergency Contact Number
- Industry Classification
  - Discharge Category
  - Review Date
  - Reviewer
  - Comments

D-2 Industry Description

- Line of Business
  - Process(es) Description
  - Product(s) Description
  - Primary SIC Code
  - Secondary SIC Code
  - Tertiary SIC Code

Number of Employees
Operating Cycle
  Days of Operation
  Starting and Stopping Times by Shift
  Time of Plant Clean-up
  Shut-down Periods
  Seasonal Variations
  Special Operating Conditions

Chemical Storage
  Container Number
  Location
  Chemical Stored
  Quantity
  Spill Prevention

D-3 Sampling Information

Wastewater Discharge Connections
  Connection Number
  Pipe Size
  Location
  Drainage Basin
  Source of Flow
  Pretreatment Facilities
  Sampling Point
  Special Sampling Instructions

D-4 Permit Information

Permit Issuance
  Date Issued
  Expiration Date
  Special Conditions

City Monitoring
  Connection Number
  Parameter
  Frequency

Self-Monitoring
  Connection Number
  Parameter
  Frequency

Excursion Information
- Type of Excursion
- Date of Excursion
- Industry Explanation
- Date of Response
- Proposed Action
- Reviewer
- Review Date
- Review Comments

D-5 Discharge Information

Water Use Data
- Water Source
- Information Source
- Time Period
- Date Reported
- Average Daily Use

Wastewater Discharge Data
- Connection Number
- Information Source
- Time Period
- Date Reported
- Average Daily Discharge to Sewer

D-6 Wastewater Quality Information

Discharge Characteristics
- Connection Number
- Parameter
- Information Source
- Date Reported
- Field Observations
- Concentration

D-7 Ordinance Limitations

- Parameter Name
- Limiting Concentration

D-8 Sampling Schedule

Route Information
- Route Number
- Account Number Reference
- Daily Sampling Capacity

Schedule Criteria
- Load Based Sampling Requirements
- Previous Samples Collected
- Random Selection
- Special Criteria

D-9 Billing Statistics

Sample Collection Cost
Sample Analysis Cost
- Parameter
- Cost Per Analysis

Surcharge Cost
- Parameter
- Measured Concentration
- Surcharge Rate

VI. CONCLUSIONS AND NEXT STEPS IN DEVELOPING THE DATA MANAGEMENT SYSTEM

The Indianapolis Industrial Surveillance Branch has an immediate need for an automated data management system. This document provides the first step in developing such a system. Our approach has been to review the existing data management system and then to develop a proposed system with the city. The proposed system is assumed to be automated due to the large volume of similar data that requires processing.

We have identified three additional phases that are required to develop and implement the data management needs that have been identified in this report. An overview of the three phases is presented in Exhibit 28. The following discussion reviews each phase in greater detail.

PHASE I: SCREEN SOFTWARE ALTERNATIVES

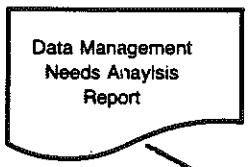
The first phase, screen software alternatives, is a thorough review of the alternatives available to the city for implementing the proposed system. This includes a review of:

- packaged software available from vendors;
- other cities' pretreatment program software; and
- custom programming.

Each of these alternatives will be reviewed with respect to the following criteria:

- what is available;
- whether it will meet the city's need;

EXHIBIT 28
CITY OF INDIANAPOLIS PRETREATMENT PROGRAM
SYSTEM DEVELOPMENT OVERVIEW



	Phase I		Phase II	Phase III
	Screen Software Alternatives	Select Alternative	Detailed Design	Implementation
Responsiblity —	Consultant	City	Consultant/Software Vendor	Consultant/Software Vendor
Tasks —	— Identify software alternatives • Vendor software • Other cities' software • Custom programming — Review hardware — Estimate costs of alternatives — Develop comparative matrix of alternatives	— Review Phase I report and select alternative — Bid/negotiate alternatives as necessary	— Prepare: • forms • reports — Identify programs — Develop implementation work plan	— Code programs — Test system — Load data — Develop procedures Manual
Time —	2 Months	Unknown	2-4 Months	Unknown

- how well the option will interface with existing hardware; and
- the estimated costs.

For comparison purposes, the evaluation of software alternatives will be summarized on a matrix. The city will then select the most desirable option or options and proceed with the development of the data management system.

If the vendor software option is selected, a request for proposals (RFP) will be prepared to solicit specific bids from vendors. Under the other cities' software option, if proven viable, the City of Indianapolis would then begin negotiations with target cities to obtain their software. Given this option, the city would also need a consultant (probably the original installation consultant) to oversee the transfer and implementation process. If the custom programming option is selected, Indianapolis would then solicit proposals from software development firms to undertake the effort.

At the end of the Phase I effort and selection process, a detailed work plan will be developed to describe the specific tasks to be undertaken in the remainder of the development process. Given the current uncertainty as to which option will be selected, the following discussion of the remaining phases is general in nature.

PHASE II: DETAILED DESIGN

The second phase in the process, detailed design, will vary with the option selected. In general, this phase will include

the development of specific system inputs and outputs so that the user can review and agree to the exact form of reports, inquiry screens, etc. The programs required to accept these inputs and produce the desired outputs will then be identified.

PHASE III: IMPLEMENTATION

The final phase, implementation, consists of program coding (conversion/modification) and testing of the system. In conjunction with this effort, users will be trained and provided with a procedures manual, and the existing city data will be loaded into the system.

APPENDIX A

INDUSTRIAL SURVEILLANCE BRANCH

EXISTING FORMS

INDEX TO APPENDIX A

INDUSTRIAL WASTE WATER SAMPLE ANALYSIS

INDUSTRY OR BUSINESS: _____

LOCATION: _____

CONTACT PERSON: _____

PHONE: _____ SAMPLED BY: _____

DATE: _____ TIME: _____ M WEATHER: _____

FIELD OBSERVATIONS

COLOR: _____ ODOR: _____

FLOATING MATERIAL: _____ TEMP: _____ C^{o} pH: _____

FLOW: _____ EST OTHER: _____

SAMPLE TYPE: _____ SAMPLE: _____

LAB ANALYSIS

ANALYSIS	CK	RESULTS	RUN BY	COMMENTS
pH				
SUS. SOL.	√	mg/l		
B.O.D.	√	mg/l		
C.O.D.		mg/l		
AMMONIA-N	√	mg/l		
OIL & GREASE		mg/l		
COPPER		mg/l		
LEAD		mg/l		
ZINC		mg/l		
CADMIUM		mg/l		
CHROME		mg/l		
PHENOLS	√	mg/l		
NICKEL		mg/l		
CYANIDE	√	mg/l		
		mg/l		

CODE NAME:_____ INSPECTION AND/OR SAMPLING SCHEDULE_____

NAME OF INDUSTRY, COMPANY OR PLANT_____

LOCATION_____

SAMPLING POINT NUMBERS AND LOCATIONS_____

DATE	INSPECTION ONLY	SAMPLE AT POINT #	PH	S.S. mg/l	T.S. mg/l	BOD mg/l	COD mg/l	DO mg/l	NO_3 mg/l	PO_4 mg/l	OILS mg/l				

6-73—1M—R.P.Co.—24682

INDUSTRIAL DISCHARGE PERMIT REPORTING FORM

PLEASE COMPLETE AND SUBMIT THIS FORM TO THE DEPARTMENT OF PUBLIC WORKS BY THE 15th OF THE FOLLOWING MONTH.

DEPARTMENT OF PUBLIC WORKS
INDUSTRIAL SURVEILLANCE
2700 SOUTH BELMONT AVENUE
INDIANAPOLIS, INDIANA 46221

PERMIT NUMBER | DISCHARGE NO. | MO. YR.

EFFLUENT CHARACTERISTICS	FLOW	pH					
SAMPLE TYFE							
FREQUENCY							
EFFLUENT LIMITATIONS							
DATE / UNITS	GPD		P.P.M.				
MONTHLY AVERAGE							
LOWEST VALUE							
HIGHEST VALUE							

SIGNATURE OF AUTHORIZED AGENT

DATE

DEPARTMENT OF PUBLIC WORKS

INDUSTRIAL SURVEILLANCE DIRECT COST

INDUSTRIAL USER AND CODE:

Nº 5206

Name_____

Serv. Loc._____

Mail. Add._____

Zip Code_____

User Officer_____

Indus. Class._____

Account No._____

SAMPLE ANALYSIS:

— LABOR —

EMPLOYEE	TIME	DATE	SMPL CODE	RESULTS

— MATERIAL —

MATERIAL	QUANTITY

TOTAL ANALYSIS

OFFICE USE ONLY

HR. RATE	COST	ACCUM. TOTAL

UNIT COST	COST

OFFICE USE ONLY

— SUB CONTRACTS —

VENDOR	SMPL. CODE	DATE	RESULTS	COST

TOTAL SUB-CONTRACT

GENERAL DATA	INITIALS	DATE
DATA LOGGED IN_____		
COMPUTATION VERIFIED_____		
APPROVED_____		

(1) White, DPW Administration (2) Blue, Industrial User (3) Pink, DPW Laboratory (4) Yellow, Numerical File

APPLICATION FOR INDUSTRIAL WASTEWATER

DISCHARGE PERMIT

For Agency Use

Application Number						
Date Received						
Year		Month				Day

(Please Type or Print)

1. NAME OF INDUSTRY OR FACILITY

_____

_____

2. LOCATION IN INDIANAPOLIS

Street Address _____

City _____ Township _____

State _____ Zip Code _____

3. Telephone Number _____

4. HOME OFFICE LOCATION

Street Address _____

City _____ Township _____

State _____ Zip Code _____

5. Telephone Number _____

6. STANDARD INDUSTRIAL CLASSIFICATION NUMBER # _____

7. NUMBER OF EMPLOYEES _____ 8. NUMBER OF SHIFTS _____

9. GIVE BRIEF DESCRIPTION OF PLANT OPERATIONS

_____

_____

_____

10. PRINCIPLE PRODUCTS

_____

_____

11. WASTEWATER CHARACTERISTICS

A. Source of Water Used in Plant Operations _____

_____

_____

B. Primary Uses of Water (other than sanitary uses) _____

_____

_____

_____

C. Total Volume of Wastewater Discharged into the Indianapolis Sewer System _____ gallons per day.

D. Describe any Pretreatment of Wastewater before discharge into the Indianapolis Sewer System

_____

_____

_____

E. Indicate if Wastewater Contains any of the Following Pollutants:

_____ Cadmium

_____ Chromium (Hex)

_____ Copper

_____ Cyanide

_____ Lead

_____ Nickel

_____ Phenols

_____ Zinc

_____ Mercury

_____ Petroleum Oils & Grease

_____ Chlorinated Hydrocarbons

_____ Insecticides, Herbicides, Fungicides

_____ Explosive Materials

_____ Suspended Solids in Excess of 300 PPM

_____ B.O.D. (Biochemical Oxygen Demand) in excess of 250 PPM

_____ _____ Ammonia (N)

F. Indicate the Number of Major Wastewater Discharge Connections to the Indianapolis Sewer System.

_____

G. Location(s) of Sampling Points that is (are) Representative of the Total Industrial Discharge

_____

_____

_____

_____

H. Wastewater Discharges other than those to the Indianapolis Sewer System

_____

_____

_____

_____

I. Indicate the Amount of Boiler or Cooling Tower Blowdown Discharge into the Indianapolis Sewer System

_____ Gallons per day

J. What Type of Boiler or Cooling Tower Treatment Used?

_____

_____

_____

_____

K. Indicate Estimates of Slug Discharges

_____ Gallons Per Day

_____ Times Per Month

L. Plant Personnel to Contact Concerning Permit Information

_____ Phone Number

_____

Title

12. I Certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief, such information is true, complete and accurate.

_____
Signature of Applicant

_____
Printed Name of Person Signing

_____
Title

_____ / _____ / _____
Year Month Day

Industrial Surveillence Branch
Division of Liquid Waste Disposal
Department of Public Works
2700 South Belmont Avenue
Indianapolis, Indiana 46221
Telephone: 634-2030 Ext. #119

Permit No. #_____

Application No. #_____

City of Indianapolis
Department of Public Works

AUTHORIZATION TO DISCHARGE

INDUSTRIAL WASTEWATER TO THE MUNICIPAL SEWER SYSTEM

In compliance with the provision of Chapter #27 of the Municipal Code of the City of Indianapolis, Indiana, and in accordance with General Ordinance #44, 1978,

is authorized to discharge wastewater from a facility located at

to the Indianapolis Municipal Sewer System.

The permit shall become effective on

This permit and the authorization to discharge wastewater shall expire at midnight _____, 19_____. In order to renew authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as required by the Department of Public Works, City of Indianapolis, Indiana, no later than sixty (60) days prior to the date of expiration.

Signed this _____ day of _____, 19_____, for the Department of Public Works, City of Indianapolis, Indiana.

_____

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning _____ and lasting until _____, the permittee is authorized to discharge from a facility located at

Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Effluent Characteristic	Daily Average	Monitoring Frequency	Sample Type

SPECIAL LIMITATIONS

a. In addition to the aforegoing limitations, the provisions of Sections #307 and #308 of the "Federal Water Pollution Control Act Amendments" of 1972 and Indiana Stream Pollution Control Board Regulations are incorporated by reference into this permit.

b. Samples taken in compliance with the monitoring requirements above shall be taken_____

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

The permittee shall submit monitoring reports to the Industrial Surveillence Branch of the Department of Public Works containing results obtained during the previous month and shall be postmarked no later than the 15th day of the month following each completed monitoring period. The first report shall be submitted by _____ for the month of _____.

a. The Industrial Surveillence Branch is at the following location:

Industrial Surveillence Branch
Department of Public Works
2700 South Belmont Ave.
Indianapolis, Indiana 46221

3. Test Procedures

Test procedures for analysis of pollutants shall conform to regulations published pursuant to Section #304 (g) of the Act, the most recent edition of "Standard Methods for the Examination of Water and Wastewater", or other methods approved by the Indiana Stream Pollution Control Board, under which such procedures may be required.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following data:

a. The Exact Place, Date and Time of Sampling

b. The Dates the Analyses were Performed

c. The Person(s) Who Performed the Analyses

d. The Analytical Techniques or Methods Used

e. The Results of All Required Analyses

5. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Industrial Surveillence Branch of the Department of Public Works.

C. Special Conditions

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. the discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Non-Compliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily average effluent limitations specified in this permit, the permittee shall provide the Industrial Surveillance Branch of the Department of Public Works the following information, in writing, within five (5) days after becoming aware of the condition:

a. A description of the discharge and cause of non-compliance.

b. The period of non-compliance, including exact dates and times, or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

3. Facilities Operation

The permittee shall at all times maintain a good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the Municipal sewer system resulting from non-compliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

5. The Industrial Surveillance Branch shall be notified immediately in the event of an accidental spill or slug discharge into the sewer system.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. the discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Non-Compliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily average effluent limitations specified in this permit, the permittee shall provide the Industrial Surveillance Branch of the Department of Public Works the following information, in writing, within five (5) days after becoming aware of the condition:

a. A description of the discharge and cause of non-compliance.

b. The period of non-compliance, including exact dates and times, or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

3. Facilities Operation

The permittee shall at all times maintain a good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the Municipal sewer system resulting from non-compliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

5. The Industrial Surveillance Branch shall be notified immediately in the event of an accidental spill or slug discharge into the sewer system.

6. Removed Substances

Solids, sludges, filter backwash or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering Muncipal sewer systems and to be in compliance with all Indiana Stautory Provisions, regulations, relative to refuse, liquid or solid waste disposal.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall, upon the reduction, loss or failure of one or more of the primary sources of power to the facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production or discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

8. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall notify the succeeding owner or controller of the existence of the permit by letter, a copy of which shall be forwarded to the Industrial Surveillance Branch of the Department of Public Works.

9. Permit Modification

After notice and opportunity for a meeting with the Industrial Surveillance Office, this permit may be modified, suspended or revoked in whole or in part during its term for shown cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit.

b. Obtaining this permit by misrepresentation of failure to disclose fully all relevant facts,

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall be affected thereby.

FINAL REPORT

Procedures to Notify Industrial Users

Peat, Marwick, Mitchell & Co.

1990 K Street, N.W.
Washington, D.C. 20006
(202) 223-9525

July 1, 1982

Ms. Susan Loudermilk
Assistant Chief Engineer
Department of Public Works
City of Indianapolis
2460 City/County Building
Indianapolis, IN 46204

Dear Ms. Loudermilk:

Enclosed for your review is our Task 2 report entitled "Procedures to Notify Industrial Users." The report presents a plan that the City can follow to notify industry when EPA passes categorical standards for certain industrial classifications.

It is important to note that this notification procedure will be integrated into the City's overall pretreatment program management plan which is currently being developed by the study team and reviewed with the Chamber of Commerce.

We appreciate the assistance that you, your staff, and the Industrial Surveillance Branch have given to us in the development of this report.

Very truly yours,

PEAT, MARWICK, MITCHELL & CO.

TABLE OF CONTENTS

LIST OF EXHIBITS

I. BACKGROUND AND OBJECTIVES

An important part of the City's pretreatment program will be a set of procedures for notifying industry of applicable pretreatment standards and, in particular, of EPA categorical standards and standards promulgated under the Resource Conservation and Recovery Act. Each time EPA publishes a categorical standard, the Industrial Surveillance Branch (ISB) must notify each industry in the system which falls into that particular industrial category.

Industry then has up to three years to comply with the new standards[1] or until July 1, 1984.[2] In some cases, industries who believe that they should not be classified as part of an industrial category have up to 60 days after the effective date of the standard to request that the EPA enforcement division director provide written certification of whether the industrial user falls within that particular subcategory. This request may also be made by the Industrial Surveillance Branch. If the Industrial Surveillance Branch makes this request for certification, it must notify any affected industrial user of that submission and the industrial user may provide written comments to EPA on the Industrial Surveillance Branch submission within 30 days of notification.[3]

The notification procedures are a key part of the pretreatment program for industry and will be integrated into the overall pretreatment management plan being developed by Peat Marwick in other tasks in this pretreatment program.

The objective of the notification procedures is to provide the City with a mechanism for contacting industries that will be

---

1 See Code of Federal Regulations, Chapter 40, Part 403.6.

2 EPA is currently revising the pretreatment standards; this date, therefore, will probably be moved.

3 Paraphrased from 40 CFR, 403.6(a).

affected by the categorical standards, notifying industries of City requests for certification, and maintaining a general system of communications with the various industrial users in the City of Indianapolis.[1,2]

---

1 40 CFR 403.8(f)(2)(iii) requires every POTW subject to the pretreatment requirements of the Federal Water Pollution Control Act (the Act) to have procedures which enable the POTW to (notify) industrial users identified under 403.8(f)(2)(i) of applicable pretreatment standards and any applicable requirements under section 204(b) and 405 of the Act and Subsection C and D of the Resource Conservation and Recovery Act.

2 EPA is currently determining the number of categorical standards that it will promulgate. The study team is not sure at this point what the total number of categorical standards that EPA will promulgate will be or the number of notification actions that the City would have to take.

II. APPROACH

To develop the notification procedures, the study team followed the plan of study Tasks 2.1 through 2.5 as identified below.

2.1 - Review Existing Administrative Procedures;

2.2 - Review Existing Management Structure;

2.3 - Coordinate With the Training Program;

2.4 - Integrate the Notification Process into Other City Programs; and

2.5 - Integrate the Administrative Needs of the Notification Process Into the Overall Development of the Pretreatment Management Plan.

Peat Marwick, working with Mark Battle Associates, reviewed the existing administrative procedures of the Industrial Surveillance Branch and discussed the steps that would be taken with the existing manual system to sort and identify industries by SIC code.

This review was coordinated with the development of the industrial user list that Peat Marwick conducted in coordination with the Industrial Surveillance Branch.

Based on the review of the existing system and an analysis of the EPA regulations regarding notification as they stood at the time of this writing, the study team began to develop a draft strategy for the notification procedures for the Industrial Surveillance Branch.

The reader should note that the development of the overall pretreatment program master plan and the management information system or data management system for the Industrial Surveillance Branch is continuing. The steps outlined for the notification procedures are based on assumptions on how the data management system will operate once it is designed and implemented in the Industrial Surveillance Branch.

The EPA regulations regarding pretreatment programs are in a state of flux. The study team relied on those regulations that became effective January 31, 1982.

III. PROPOSED NOTIFICATION PROCEDURE

The federal regulations do not specify particular steps to be followed in creating the notification procedure; however, the most direct course toward creating th procedures follows as a logical outgrowth of the requirements listed in the general pretreatment regulations in 40 CFR 403.8(f)(2)(i) and 40 CFR 403.8(f)(2)(ii).[1] These regulations, respectively, require the POTW to "identify and locate all possible industrial users that might be subject to the POTW's pretreatment program," and to "identify the character and volume of pollutants contributed to the POTW by the industrial user." These requirements correspond to the procedures developed by the Indianapolis pretreatment program team in Task 1. In short, it becomes a simple matter to utilize the data base created via the Industrial Wastewater Pretreatment Questionnaire developed in Task 1 to identify and notify the relevant industrial users of categorical pretreatment standards or of other pretreatment program requirements. The specific steps by which this is accomplished are presented below.

The Industrial Wastewater Pretreatment Questionnaire created for Task 1 provides information on company name, address, product, process, and wastewater information for a comprehensive list of relevant industrial users in Indianapolis. The pretreatment team utilized the product and process information to assign to the various industries standard industrial classification (SIC) codes that are believed to accurately reflect industrial activities of those industries.

SIC codes, in turn, will be used to signal which of 34 EPA-designated industrial categories a particular industrial user should be assigned to. Finally, all of the above information--company name and address, product, process, wastewater information and SIC codes was stored in a computer data base.[2] Information in the computer program can be modified by

---

[1] CFR, Vol. 46, No. 18, January 28, 1981, p. 449.

[2] The study team has the industrial user list stored on James M. Montgomery's computer. The City will hae access to that computer through March 1983. Beyond that date the data management system being developed in Task 1.11 will be available to provide the city with the data if the system is implemented. In the absence of this system, the Task 1 summary reports by category can be used to identify appropriate industries.

the Industrial Surveillance Branch or supplemented at any time to reflect changes in the industrial data base. As EPA issues categorical pretreatment standards, or when the City wishes to notify a particular group of industrial users of some aspect of the program, the Industrial Surveillance Branch will be able, through the data management system, to create a complete list of the relevant users by requesting the system to identify all of those industrial users characterized by one or more of a particular group of SIC codes. In addition to printing a list of names and other information on each user, the system should have the capacity to print mailing labels for the desired group.

Once the list of industries to be notified has been created users will be sent a packet of information containing:

- Letter of transmittal describing the program (see Exhibit 2-1).
- Notice of issuance of categorical pretreatment standards including effective date of such standards.
- Table of maximum allowable discharge limits for one day of the particular substance(s) of concern.
- Document entitled "How the Categorical Pretreatment Standards Process Works" (see Appendix A), which informs industrial users of how the program works, their industrial category, and what their obligations are in achieving compliance with the categorical standards. The document, in large part, repeats the "Reporting Requirements for POTWs and Industrial Users" contained in 40 CFR 403.12.
- A flow-diagram corresponding to Steps 1-8 of the categorical pretreatment standards program (Appendix A). The flow diagram depicts in graphic form the major steps involved in the categorical pretreatment standards program from EPA issuance of standards to final industrial-user compliance.
- Typical pretreatment compliance schedule. This document will lay out the major steps and commencement and completion dates of the "increments of progress." "Increments of progress," discussed in 40 CFR 403.12(h), are required as part of the 180-day base monitoring report required in 40 CFR 403.13(b)(1-7). These requirements are discussed in Appendix A.

It will be the responsibility of the industrial users to complete the 180-day baseline monitoring report and return it

within 180 days to the Industrial Surveillance Branch. Those industries requiring additional pretreatment and/or operations maintenance will also be responsible for returning to ISB an increments of progress schedule. The Industrial Surveillance Branch will either approve the submitted compliance schedule or return it to the industrial users with suggested modifications. The Industrial Surveillance Branch will issue notices reminding relevant industrial users of the obligation to submit the 180-day report. These notices will be mailed to the industrial user one month before this due date.

EXHIBIT 2-1

TYPICAL LETTER TO NOTIFY AN INDUSTRIAL USER

Gentlemen/Ladies:

Industrial dischargers into the City's sewer system have for some time been subject to federal pretreatment regulations governing discharges into the City's sewers and publicly owned treatment works (POTW) under provisions of the Federal Clean Water Act. As an initial step in the City's effort to meet its obligations under the federal regulations, a City-wide survey of industrial users of the City sewer system was conducted during the spring of 1982.

On _____, the Environmental Protection Agency (EPA) published, in the Federal Register, effluent guidelines and standards for the _____ category, as required by the Federal Clean Water Act. The purpose of these guidelines is to limit or inhibit introduction into the sewer system of pollutants that may damage, interfere with, or pass through the POTW. An attached table lists the maximum allowable discharge limits for one day of the particular substance of concern. These limits, as mandated by federal regulations, reflect the best practicable treatment currently available.

According to the City's records, your facility Standard Industrial Classification (SIC) code _____ places the facility within the _____ category of industrial users regulated under the prescribed guidelines. SIC Code determinations have been made for industries on the basis of product and process information provided to the City during the Industrial Wastewater Survey and subsequent surveillance activities by the City. These SIC codes are believed to describe accurately the activities of your facility.

The City's federal and state discharge permits require that the City enforce all federal pretreatment standards established by EPA for all industries discharging into the public sewer system.

If you believe that you have been inaccurately identified as belonging to the above industrial category, request written certification from EPA by contacting Dale Bertelson, Chief of the Industrial Surveillance Branch, within 30 days after receiving this notice.

Industrial users correctly identified as belonging to the above category are required by the General Pretreatment Regulations of Existing and New Sources of Pollution, 40 CFR 403.12,

to submit a compliance report to this office within 180 days of the effective date of the pretreatment standards. The compliance report must contain the information described in Step 5 of the attached document, "How the Categorical Pretreatment Standard Compliance Process Works." Please note that fulfilling the obligations of the 180-day baseline monitoring report is only the first step in achieving compliance with the categorical pretreatment standards. Subsequent steps are outlined in the attached compliance process document and flow diagram. Please review these requirements thoroughly.

If you have any questions, please contact Dale Bertelson at 634-2030.

Very truly yours,

APPENDIX A

HOW THE CATEGORICAL PRETREATMENT STANDARDS COMPLIANCE PROCESS WORKS

HOW THE CATEGORICAL PRETREATMENT STANDARDS COMPLIANCE PROCESS WORKS

Exhibit A-1 presents an overview of the steps necessary to comply with the categorical standards in the prescribed three-year period. The following discussion describes the specific steps that are summarized in Exhibit A-1.

Step 1 The Environmental Protection Agency (EPA) issues Pretreatment Guidelines and Standards for a particular industrial category or subcategory. Compliance by existing sources with the standards shall be within three years of the date the standard is effective unless a shorter compliance time is specified in the appropriate subpart of 40 CFR Chapter I, Subchapter N.

Step 2 When categorical standards are issued, the Industrial Surveillance Branch (ISB) of the Department of Public Works determines on the basis of Standard Industrial Classification (SIC) codes which industrial discharges are included under the categorical standards. SIC codes have been assigned on the basis of product and process information.

Step 3 ISB creates a list of relevant industrial dischargers and prints mailing labels.

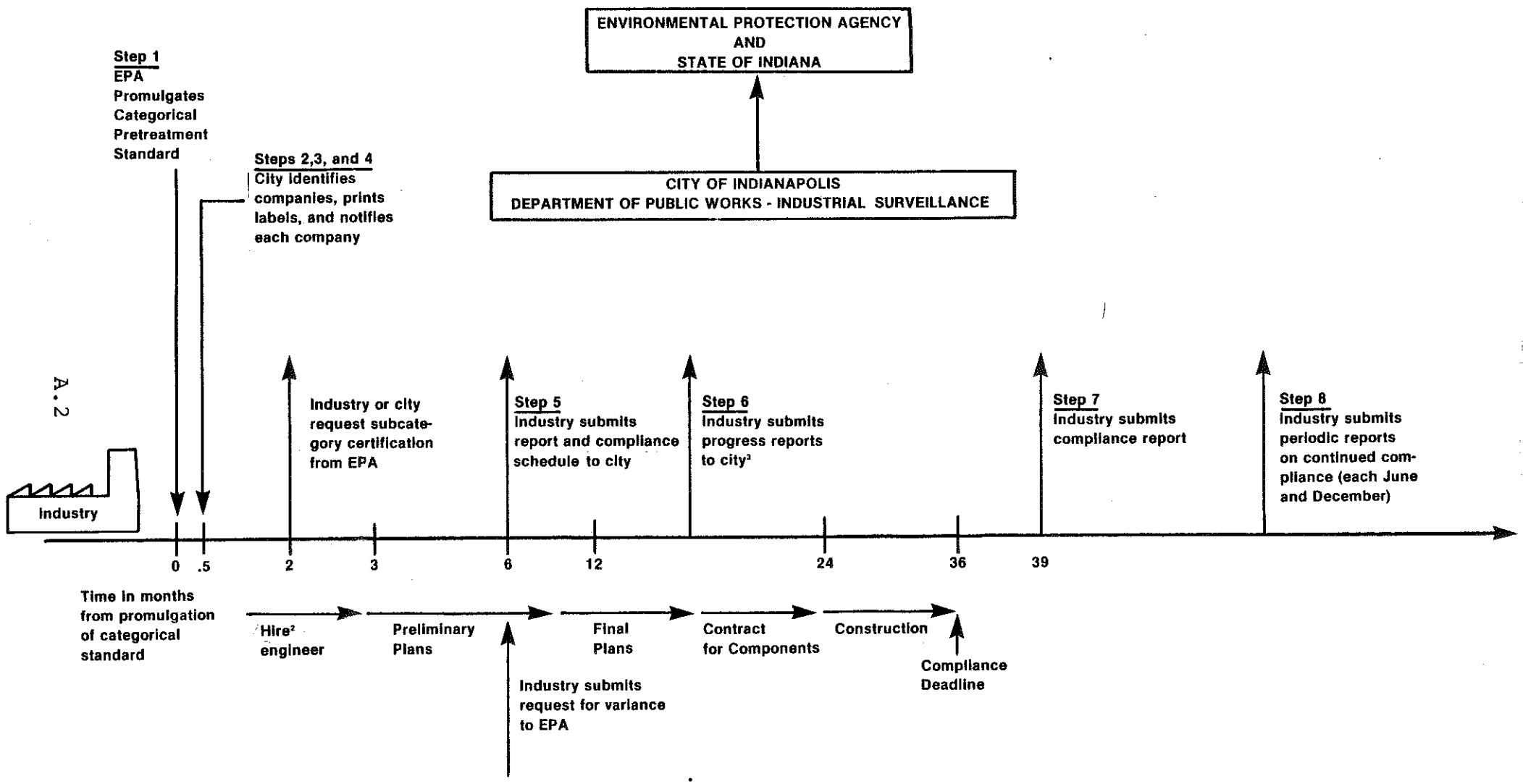
Step 4 ISB sends industrial dischargers notice of their obligations to comply with the categorical pretreatment standards and of the requirement to submit a "180-day baseline report."[1]

[1] 40 CFR 403.6 states that: Within 60 days after the effective date of a pretreatment standard for a subcategory under which an industrial user believes itself to be included, the industrial user may request that the EPA Regional Enforcement Division Director provide written certification to the effect that the industrial user does or does not fall within that particular category. (See 40 CFR 403.6 for procedural requirements necessary to complete such a request.)

EXHIBIT A-1

CITY OF INDIANAPOLIS PRETREATMENT PROGRAM

OVERVIEW OF COMPLIANCE SCHEDULE FOR CATEGORICAL STANDARDS[1]



1 See EPA General Pretreatment Regulations, Vol. 46, No. 18, January 28, 1981, effective February 1, 1982, Sections 403.12 and 403.6.

2 The time for each compliance step will vary.

3 14 days after completion of major events.

Step 5 Reporting and Compliance Requirements for Industrial Users.[1] 40 CFR 403.12 states that:

> Within 180 days after the effective date of a categorical pretreatment standard, existing industrial users subject to such pretreatment standards who are currently discharging or scheduled to discharge into a POTW (Publicly Owned Treatment Works) will be required to submit to ISB a report which contains the information listed below. New sources shall be required to submit to ISB a report which contains the information listed in the first five bullets:[2]
>
> . the name and address of the facility including the name of the operator and owner;
>
> . a list of environmental permits;
>
> . the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by such industrial user;
>
> . the average and maximum wastewater flow from such industrial user to the POTW, in[3] gallons per day.

---

1 Steps 5, 6, 7, and 8 have been adapted from 40 CFR 403.12, with the original words "control authority" replaced by "ISB."

2 Note on report format: EPA is currently repairing standard baseline reporting forms. In the interim any "reasonable and orderly format will be an acceptable format for the reports." It is required that sufficient detail be provided ISB to justify the data of the incremental steps through which the user will achieve compliance (See Exhibit 7 below). Also, a sufficent description of the incremental benchmarks must be provided so that a "reasonable POTW operator can recognize whether or not those benchmarks toward full compliance are being achieved on schedule."

3 Industrial users may be permitted to report estimated rather than measured flows where ISB approves of these estimates in recognition of cost or feasibility considerations.

- the nature and concentration of regulated pollutants in the discharge from each regulated process from such industrial user and identification of the applicable pretreatment standards and requirements. The concentration shall be reported as maximum or average levels as provided for in the applicable pretreatment standards and requirements.[1] If an equivalent concentration limit has been calculated in accordance with the pretreatment standard, this adjusted concentration limit shall also be submitted to the ISB for approval.

- a statement, reviewed by an authorized representative of the industrial user (as defined in the General Notes below and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis and whether additional operation and maintenance (O&M) and/or additional pretreatment is required for the industrial user to meet the pretreatment standards and requirements; and

- if additional pretreatment and/or O&M will be required to meet the pretreatment standards the shortest compliance schedule by which the industrial user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. The following conditions shall apply to the schedule:

  - the schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and

---

[1] Note on sampling requirements: Facilities with average daily process flows less than 250,000 gpd are required to take 3 samples within a two-week period. Facilities with process flows greater than 250,000 gpd are required to take 6 samples within a two-week period.

operation of additional pretreatment required for the industrial user to meet the applicable pretreatment standards (for example, hiring an engineer, completing preliminary plans, completing final plans, executing contracts for major components, commencing construction, completing construction, etc.)

- no increment referred to in Step 5 of this section shall exceed nine months.

Step 6 Not later than 14 days following each date in the schedule and the final date for compliance, the industrial user shall submit a progress report to ISB including, as a minimum, whether or not it complied with the increment of progress (see Exhibit A-2) to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the industrial user to return to the compliance schedule established. In no event shall more than nine months elapse between such progress reports to ISB.

Step 7 Within 90 days following the date for final compliance with applicable pretreatment standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any industrial user subject to pretreatment standards and requirements shall submit to the ISB a report indicating the nature and concentration of a pollutant in the discharge from the regulated process which are limited by pretreatment standards and requirements and the average and maximum daily flow for these process units, which are limited by such pretreatment standards or requirements. The report shall state whether the applicable pretreatment standards and requirements are being met on a consistent basis and, if not, what additional O&M and/or pretreatment is necessary to bring the industrial user into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by an authorized representative of the industrial user, as defined below and certified to by a qualified professional.

Step 8 Any industrial user subject to a pretreatment standard, after the compliance date of such pretreatment standard or, in the case of a new source, after commencement of the discharge into the POTW, shall submit to the ISB during the months of June and December, unless required more frequently in the pretreatment standard or by the

EXHIBIT A-2

CITY OF INDIANAPOLIS PRETREATMENT PROGRAM

SAMPLE PRETREATMENT COMPLIANCE SCHEDULE
(Suggested Guidelines)

COMPANY NAME_____

FACILITY ADDRESS_____

MAILING ADDRESS_____

INCREMENT OF PROGRESS	START DATE	COMPLETION DATE
1. Hire or appoint engineer	_____	_____
2. Assess treatment system design needs	_____	_____
3. Prepare treatment system design	_____	_____
4. Hire construction contractor	_____	_____
5. Execute contracts for major components	_____	_____
6. Begin construction	_____	_____
a. Prepare site	_____	_____
b. Prepare foundations	_____	_____
c. Erect buildings and structures	_____	_____
d. Install equipment	_____	_____
7. Begin pretreatment operations	_____	_____

(Please note that no single increment shall exceed nine months.)

_____
Signature of official

_____
Title

_____
Date

Approved by ISB

Yes_____ No_____

Suggested changes

_____

_____

ISB or the approval authority, a report indicating the nature and concentration of pollutants in the effluent which are limited by such pretreatment standards. In addition, this report shall include a record of all daily flows which, during the reporting period, exceeded the average daily flow reported in Step 5.

At the discretion of the ISB and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the ISB may agree to alter the months during which the above reports are to be submitted.

The ISB may impose mass limitations on industrial users that are using dilution to meet applicable pretreatment standards and requirements or in other cases where the imposition of mass limitations are appropriate. In such cases, the report required by the first paragraph of this step shall indicate the mass of pollutants regulated by pretreatment standards in the effluent of the industrial user.

The industrial user shall notify the POTW immediately of any slug loading, as defined by Section 403.5(b)(4) by the industrial user.

General Notes on the Eight Compliance Steps

The reports required in Steps 5, 7, and 8 shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass loadings when requested by the ISB, of pollutants which are limited by the applicable pretreatment standards. The frequency of monitoring shall be prescribed in the applicable pretreatment standards. All analyses shall be performed in accordance with procedures established by the Administrator pursuant to Section 304(g) of the Act and contained in 40 CFR Part 136 and amendments thereto or with any other test procedures approved by the Administrator. Sampling shall be performed in accordance with the techniques approved by the Administrator.[1]

---

[1] Where 40 CFR, Part 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the EPA publication, Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants, April, 1977, and amendments thereto, or with any other sampling and analytical procedures approved by the Administrator.

The reports required by Steps 5, 7 and 8 must be signed by an authorized representative of the industrial user. An authorized representative may be:

- a principal executive officer of at least the level of vice president, if the industrial user is a corporation;
- a general partner or proprietor, if the industrial user is a partnership or sole proprietorship, respectively;
- a duly authorized representative of the individual designated above in the first two paragraphs if such representative is responsible for the overall operation of the facility from which the indirect discharge originates.

The report required in Steps 5, 7, and 8 shall be subject to the provision of 18 U.S.C. 1001 relating to fraud and false statements and the provisions of Section 309(c)(2) of the Act governing false statements, representations, or certifications in reports required under the Act.

Any industrial user and POTW subject to the reporting requirements established in this section shall maintain records of all information resulting from any monitoring activities required by this section. Such records shall include for all samples:

- the dates of analyses;
- who performed the analyses;
- the analytical techniques (methods) used; and
- the results of each analyses.

Any industrial user or POTW subject to the reporting requirements established in this section shall maintain records of monitoring activities and results for three years (whether or not such monitoring activities are required by this section) and shall make such records available for inspection and copying by the Director and the Regional Administrator and POTW, in the case of an industrial user. This period of retention shall be extended during the course of any unresolved litigation regarding the industrial user or POTW or when requested by the Director and the Regional Administrator.